PONY

سلسلة كتب الاستاذ

2023

4th

Prim
First

مادة اساسية
مضافة للمجموع

Mr. Ahmed Om





ICT

Information and Communication Technology

PONY

Marwa Fehed

ICT

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4th Primary

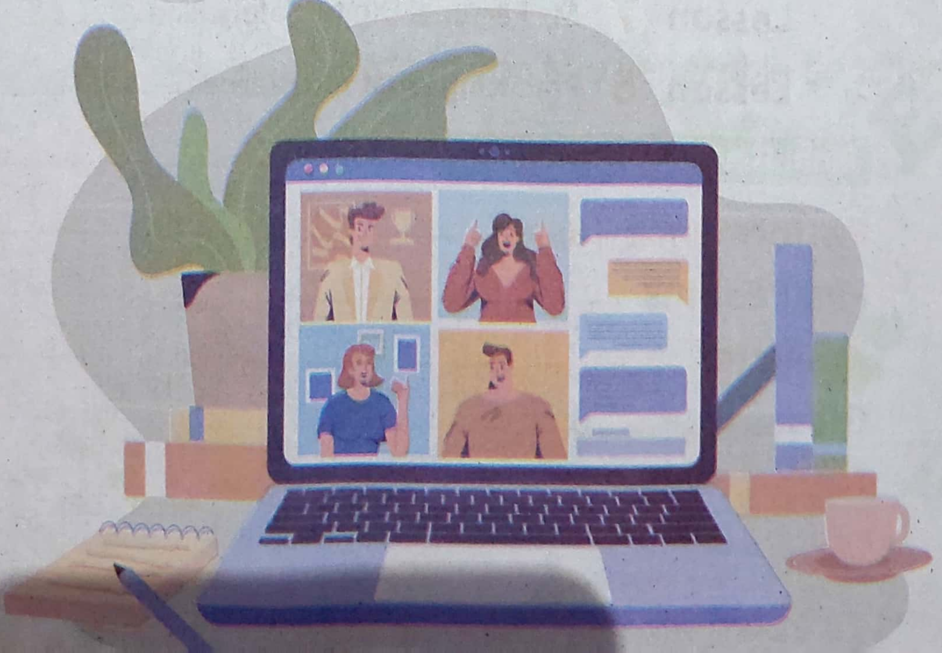
First Term

Main Book

Contents

Theme 1

The Role of ICT in Our Lives



Theme 1 Scope and Sequence

The Role of ICT in Our Lives

Essential Question: How can we use technology effectively?

Lesson	Topics	Skills Integration		
		Life Skills	Values	Issues and Challenges
LESSON 1 Explorer in Action	• How archaeologists use ICT in their jobs and daily life. • Technology used to explore the earth.	**Learning to know:** critical thinking; problem solving	**Academic values:** appreciation of science and scientists	**Issues of globalization:** technological awareness
LESSON 2 The Evolution of Technology	• The history of ICT. • How technology is used in our daily life. • Practice of typing skills.	**Learning to know:** critical thinking; problem solving **Learning to be:** communication; self-management	**Academic values:** appreciation of science. and scientists; curiosity	**Issues of globalization:** technological awareness
LESSON 3 Components of Computer Systems	• The main components of computer systems. • Input, output and data • Different types of computer hardware.	**Learning to do:** collaboration **Learning to know:** creativity; problem solving	**Academic values:** perseverance	**Issues of globalization:** digital citizenship
LESSON 4 Software and Operating Systems	• Operating systems and software. • How a computer communicates.	**Learning to be:** communication **Learning to know:** creativity	**Work values:** collaboration	**Issues of globalization:** technological awareness
LESSON 5 Supporting People of Determination	• Assistive technology. • How technology can improve the lives of people of determination.	**Learning to know:** creativity **Learning to live together:** empathy; respect for diversity	**Co-existence values:** respect; tolerance and acceptance	**Non-discrimination issues:** discrimination against people with special needs
LESSON 6 Common ICT Problems and Solutions	• Common ICT problems. • Solutions to common ICT problems.	**Learning to know:** creativity; problem solving		**Issues of globalization:** technological awareness
LESSON 7 Collecting, Analyzing and Graphing Data	• Digital tools to organize data. • Collecting, analyzing and graphing data.	**Learning to be:** communication **Learning to live together:** participation	**Academic values:** objectivity	
LESSON 8 Reporting Findings	• Different ways to communicate electronically.	**Learning to be:** communication **Learning to know:** creativity; critical thinking	**Co-existence values:** participation	**Issues of globalization:** entrepreneurship

Explorer in Action

Albert Lin

- Albert Lin is an archaeologist.
- He uses different tools to explore archaeological sites without digging.

ألبرت لين عالم آثار - يستخدم أدوات مختلفة لاستكشاف المواقع الأثرية دون حفر.



The Importance of Archaeological Tools

1. They save time, cost and effort.

توفر الوقت والتكلفة والجهد.

2. They help archaeologists to decide where to dig by doing surveys above the ground.

إنها تساعد علماء الآثار في تحديد مكان البحث أو الحفر عن طريق إجراء مسح فوق سطح الأرض.

Archaeological Tools

Used to locate things

Above the Ground

1. Satellites



2. GPS



3. Drones



Under the Ground



1. Magnetometer



2. Ground penetrating radar

Archaeological tools that locate things above the ground

1 Satellites

- Used to get information and pictures of any area.

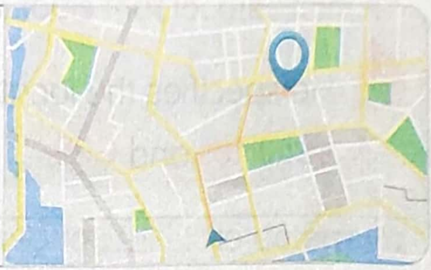
« تستخدم الأقمار الصناعية للحصول على معلومات وصور لأي منطقة.



2 GPS (Global Positioning System)

- Used to find the location of something using satellites.

« يستخدم نظام تحديد المواقع للعثور على موقع شيء ما باستخدام الأقمار الصناعية.



3 Drones

- Used to get information and pictures of any area.

« تستخدم الطائرات بدون طيار للحصول على معلومات وصور لأي منطقة.



Archaeological tools that locate things underground

1 Magnetometer

- Used to measure the magnetic field so we can find metals (minerals) underground.

« يستخدم مقياس المغناطيسية لقياس المجال المغناطيسي حتى نتمكن من العثور على المعادن تحت الأرض.



2 Ground Penetrating Radar (GPR)

- Used to discover objects buried underground.

« يستخدم الرادار المخترق للأرض للعثور على الأجسام المدفونة تحت الأرض.



- You don't have to be a scientist, engineer or archaeologist to use technology.
- Research for technology online or ask your teacher, family and friends.

Think with me!



- **How does an archeologist explore archeological sites?**

1	He specifies the location of the site using satellites and GPS.
2	He goes to the location using GPS.
3	He searches for things above the ground using drones.
4	He searches for things under the ground using the magnetometer and ground penetrating radar.



- **How does an architect use technological tools before starting construction?**

1. He uses GPS to locate construction sites, such as bridges and buildings.
2. He uses the magnetometer and ground penetrating radar to discover objects buried underground before construction to avoid any damage.



Exercises

1 Choose the correct answer:

1. Albert Lin is a/an .... that uses modern technology to explore ancient wonders.
   a. doctor b. architect c. archaeologist
2. The .... is one of the archaeological tools that locates things above the ground.
   a. magnetometer b. drone
   c. ground penetrating radar
3. A GPS receiver in your phone is connected to .... to determine locations.
   a. spacecrafts b. rockets c. satellites
4. The .... enables us to identify objects buried underground.
   a. GPR b. GPS c. GPA
5. .... and .... are used to get pictures of any region.
   a. Satellites and GPS b. Drones and GPS
   c. Satellites and drones
6. Archaeologists use a ground penetrating radar to ....
   a. locate objects above the ground
   b. explore objects under the ground
   c. determine the direction of any location
7. If your friend sent you a WhatsApp message containing his address, this means that he uses the ....
   a. ground penetrating radar
   b. global positioning system (GPS) c. magnetometer
8. What is the first step done by the archaeologist to explore any new location?
   a. He uses drones to search for things above the ground .
   b. He uses GPR to go to the location.
   c. He uses satellites to know the location.

9. The .... is used to locate metallic bridges underground.
   a. magnetometer b. drone c. GPR
10. The archaeological tools help archeologists ....
   a. know the location of the supermarket
   b. decide where they can dig
   c. communicate with their friends

2 Write the scientific term:

1. A tool that enables us to know the location of any place we want to visit. (..............)
2. A tool that enables us to identify buried objects underground. (..............)
3. A tool that enables us to identify minerals underground. (..............)
4. A tool that gets pictures of things above the ground with the help of a person that controls it on Earth's surface. (..............)

3 Put (✓) or (✗):

1. Albert Lin uses satellites and GPR to know the location of ancient regions. (   )
2. Tourists use GPS, while archaeologists can use GPS and GPR. (   )
3. The archaeological tools help tourists decide where to dig. (   )
4. The Global Positioning System (GPS) is used to locate things underground. (   )
5. The magnetometer is used to determine directions via satellites. (   )
6. Drones are used by archaeologists to get pictures of objects above the ground. (   )
7. Archaeologists use a ground penetrating radar to find objects above the ground. (   )
8. GPS is used to find any place you want to visit, and it is connected to satellites. (   )
9. GPR is used to discover minerals underground before digging. (   )
10. Architects discover objects buried underground before construction to avoid any damage. (   )

4 Complete the following sentences:

1. Albert Lin is an .... that uses different tools to explore the archaeological sites without ....
2. The archaeological tools save ...., ... and .... they also help archaeologists ....
3. .... and .... are archaeological tools that locate things underground, while .... and .... locate things above the ground.
4. .... and .... are used to get pictures of any area.
5. .... is used to find the location of something via ....
6. .... is used to measure the magnetic field to explore .... underground, while .... is used to discover objects buried underground.

5 Cross out the odd word:

1. Magnetometer – GPS – GPR (..................)
2. Satellites – GPR – GPS (..................)

6 Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1 Magnetometer	a. enables us to get images of objects above the ground.
2 GPS	b. enables us to discover minerals underground.
3 GPR	c. enables us to know the location of any place we want to visit.
4 Drone	d. enables us to discover objects buried underground.

1 .... 2 .... 3 .... 4 ....

7 Read the following scenarios below. Then decide which tool can be used:

1. You receive a message from your friend who is lost and you want to try to find him. (............)
2. You want to see if there are any old coins buried underground. (............)
3. You want to know if there are any old buildings underground. (............)

School Book Questions

Answered in the Guide Answers

Life Skills: 1 Read and answer:

1. In your opinion, what are the most important skills for an engineer?

   ....

   ....

2. In your opinion, what are the most important skills for an archaeologist?

   ....

   ....

Graphic Organizer 2 Read and complete:

Which tools help archaeologists locate things above the ground?

Which tools help archaeologists locate things below the ground?

(GPS – Ground penetrating radar – Magnetometer)

Archaeologists, Tools

1 Locate things above the ground	2 Locate things under the ground
....	....
....	....
....	....
....	....
....	....

Critical Thinking 3 Think and answer:

Read the scenarios below. Decide which tools from Exercise 2 could be used for each scenario.

1. You want to see if there are any old coins buried underground.

....

2. You receive a message from your friend who is lost and you want to try to find him.

....

3. You want to find out if there are any old buildings under the ground.

....

4 Discuss in pairs:

1. Mr. Lin uses his engineering experiences in his archaeological work. Think of other subjects or backgrounds which might be useful for an archaeologist.

....

....

2. Technology has become very advanced in the last fifty years. Think about the next fifty years. What changes do you think we will see in technology? How might they help archaeologists?

....

....

5 Think and answer:

Imagine you are planning an archaeological expedition to find the remains of a city buried in the desert. Write a short paragraph to explain what technology you will use for your expedition and how you will use it.

[For our archaeological expedition, we will need to use] ....

....

....

Lesson 2

The Evolution of Technology

Technology has come a long way! We have **four ages** of technology.

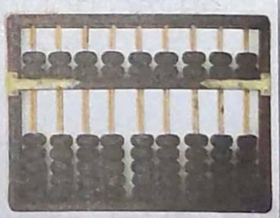
Age of Technology	Dates
1 The Pre-Mechanical Age	3000 BC - 1450
2 The Mechanical Age	1450 - 1840
3 The Electro-Mechanical Age	1840 - 1940
4 The Electronic Age	1940 - present

1 The Pre-Mechanical Age (3000 BC - 1450)

In this age, people communicated together using **pictures** and **drawings** like **hieroglyphics** and then using **words** and **numbers**.

في هذا العصر، تواصل الناس معًا عن طريق الصور والرسم مثل الكتابة الهيروغليفية ثم تواصلو بالكلمات والأرقام.

Some of the tools that appeared in this age inculde:

Pens and pencils	Papers	Manuscripts parchment	Abacus counter
			
أقلام الحبر والأقلام الرصاص	الورق	المخطوطات	العداد الرقمي (أباكس)

Many of these documents are available online and on The Egyptian Knowledge Bank (EKB).

Egyptian Knowledge Bank
بنك المعرفة المصري

2 The Mechanical Age (1450 - 1840)

- In this age, there was a technology revolution and people recorded a tremendous amount of information, which led to a desire to make it easier to record and share this information.

في هذا العصر، كانت هناك ثورة تكنولوجية وسجلت الشعوب كمية هائلة من المعلومات التي أدت إلى الرغبة في تسهيل التسجيل والمشاركة.

- Some of the inventions that appeared in this age inculde:

Printing process (facilitated printing books)

عملية الطباعة (سهلت طباعة الكتب)



Typewriter
آله كاتبة



Old printing machine
ماكينة طباعة قديمة

The Pascaline (an early calculator)

آلة باسكالين



3 The Electro-Mechanical Age (1840 - 1940)

- This was the beginning of communication as we know it today and electricity was used for the first time.

كانت هذه بداية الاتصال كما نعرفها اليوم وتم استخدام الكهرباء لأول مرة.

- Some of the inventions that appeared in this age inculde:

Telephone, Telephone lines



Record player



First digital computer

8 feet high - 50 feet long - 2 feet wide - it weighed 50 tons



4 The Electronic Age (1940 – present)

- This age is known as the "information explosion age".
- Inventions and improvements are happening with amazing speed.

يُعرف هذا العصر بـ "عصر انفجار المعلومات" - كانت الاختراعات والتحسينات تحدث بسرعة مذهلة.

- Some of the inventions that appeared in this age inculde:

1. They help us communicate using emails and instant messages.

Computers



Laptops



2. They help us locate things.

Satellites



GPS



The History of ICT

Age of Technology	Inventions
The Pre-Mechanical Age 3000 BC – 1450	Pens - pencils - papers - parchments - abacus counter
The Mechanical Age 1450 – 1840	Typewriter - printing machine - Pascaline
The Electro-Mechanical Age 1840 – 1940	Telephone – telephone lines - record player – 1st computer
The Electronic Age 1940 – present	Computers - laptops - smartphones - word processor - software – video calls - satellites - GPS - online maps

Exercises

1 Choose the correct answer:

1. ...... appeared before The Mechanical Age, while ...... appeared after it.
   a. Pencils - Pascaline   b. Abacus - telephone
   c. Parchment - typewriter
2. .... appeared during The mechanical revolution age.
   a. Pascaline   b. Abacus   c. Parchments
3. Early ancient people communicated together using ....
   a. letters   b. symbols   c. numbers
4. The .... is known as "technology revolution age".
   a. Mechanical Age   b. Electro-Mechanical Age
   c. Electronic Age
5. The.............. is known as "Information explosion age".
   a. Mechanical Age   b. Electro-Mechanical Age
   c. Electronic Age
6. .... is used as a means of communication in modern times.
   a. Pencil   b. Email   c. GPS
7. The era of electronic revolution was characterized by the existence of ....
   a. laptops   b. typewriters   c. telephones
8. Pascaline machine is the first version of a ....
   a. printer   b. calculator   c. typewriter
9. The printing process for books started to appear in the ....
   a. Mechanical Age   b. Electro-Mechanical Age
   c. Electronic Age
10. The timeline of the technological evolution is ....
    a. words - pens - typewriter
    b. typewriter - pens - words
    c. pens - typewriter – words

2 Write the scientific term:

1. The age where people used drawings and pictures to communicate. (..................)
2. The age in which the electricity was used for the first time. (..................)
3. The age in which the printing process started to appears. (..................)
4. The age known as the "Information explosion age". (..................)
5. The early calculator that was used during The Mechanical Age. (..................)
6. The way of communication between ancient Egyptians. (..................)
7. One of the inventions that helped people to send emails. (..................)
8. One of the inventions that helped us locate the position of any place. (..................)

3 Put (✓) or (✗):

1. Ancient people communicated first using symbols, then using words and numbers. ( )
2. The abacus counter is one of the machines used in our times. ( )
3. The Pascaline is an example of technology in the Pre-Mechanical Age. ( )
4. Pens, papers and typewriters are used in the Pre-Mechanical Age. ( )
5. Books began to appear in the mechanical revolution era. ( )
6. Electricity was first used in The Electro-Mechanical Age. ( )
7. The information age extends to our present age. ( )
8. Electricity, telephones and the first computer appeared in The Electro-Mechanical Age. ( )

4 Complete the following sentences:

1. .... is considered the first version of a calculator that was used in the .... age.
2. Electricity appeared in .... era, which led to the appearance of new inventions, such as .... and ....
3. Ancient people communicated using .... and .... first, then they used .... and ....

4. Printing the books began at the .... Age by using .... and ....
5. The first digital computer appeared in The .... Age and it weighed .... tons.
6. Our age is known as .... , and there are many invention in it, such as .... and ....

5 Cross out the odd word:

1. Pencils - Pascaline - Abacus - Manuscripts (........)
2. Typewriter - Printing machines - Record player (........)
3. First computer - Laptop - Telephone (........)
4. Satellites - GPS - Online map - Telephone (........)

6 Choose from column (A) what suits it in columns (B) and (C):

Column (A) Dates	Column (B) Age	Column (C) Inventions
1 3000 BC - 1450	a. The Electronic Age	a. Printing machines, calculators and typewriters
2 1450 - 1840	b. The Electro-Mechanical Age	b. Satellites, smartphones, online maps - words
3 1840 - 1940	c. The Mechanical Age	c. Pens, pencils, parchments, papers, and abacus
4 1940 - present	d. The Pre-Mechanical Age	d. Telephones, telephone lines and record players

1. .... , ... 2. .... , ... 3. .... , ... 4. .... , ...

7 Read the following scenarios. Then decide which method of communication can be used:

1. Your friend asks you if you can meet him tomorrow and you need to send him a short reply to say yes.
2. Your grandmother lives in a different city and you want to tell her about what you have learned at school, and what you want to do when you visit her.
3. You want to send a short message to your cousin to say happy birthday.

School Book Questions

Answered in the Guide Answers

Comprehension 1 Look and match:

Complete the table with the information from each box.

The Electronic Age
The Electro-Mechanical Age
The Mechanical Age
The Pre-Mechanical Age

a. Printing machine, calculator, typewriter
b. Satellite, smartphone, online maps, word processor
c. Pens, pencils, parchment, paper, abacus
d. Telephone, telephone lines, record player

Column (A) Dates	Column (B) Age	Column (C) Inventions
1 3000 BC - 1450	The Pre-Mechanical Age	
2 1450 - 1840		
3 1840 - 1940		
4 1940 - present		

Graphic Organizer 2 Think and write

Think about how technology develops. Look at Exercise 1 again. Complete the timelines showing how technology has developed.

Pencils → .... → .... → Word processor

Abacus → .... → ....

Issues and Challenges 3 Practice and write

Work with a partner and practice typing and writing. Measure your speed each time. Type/write this sentence: Eat healthily, live happily, respect all and be yourself.

P.O.C.	Attempt 1	Attempt 2	Attempt 3
Writing on paper			
Typing on a cell phone (if available)			
Typing on a computer keyboard			

Critical Thinking 4 Think and answer

Read the scenarios. What method of communication would you choose in each situation? Write your answer and explain why.

1. Your friend asks you if you can meet tomorrow. You need to send him/her a short reply to say yes.

 ....

2. Your grandmother lives in a different city. You want to tell her about what you learned in school and what you want to do when you visit her.

 ....

3. You want to send a short message to your cousin to say happy birthday.

 ....

ICT and Me 5 Read and answer the questions

1. What kinds of technology do you use at home? How do you use them?

 ....

2. What kinds of technology do you want to use in the future?

 ....

Lesson 3

Components of Computer Systems

The computer

It is an electronic device used for processing data.

هو جهاز إلكترونى يعمل كمعالج للبيانات.



The importance of the computer

1. It can store information and restore it.
2. It enables us to write documents.
3. It enables us to send emails.
4. It enables us to play games.
5. It enables us to browse the internet.
6. It enables us to edit or create data tables, Power Point presentations, spreadsheets, and videos.

1 يمكنه تخزين المعلومات واستعادتها. 2 يمكننا من كتابة الوثائق.

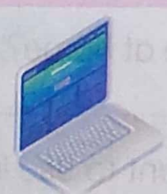
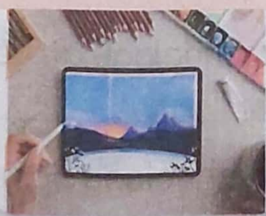
3 يمكننا من إرسال بريد إلكتروني. 4 يمكننا من ممارسة الألعاب.

5 يمكننا من تصفح الإنترنت. 6 يمكننا من تعديل أو إنشاء عروض باوربوينت - ملفات الإكسيل - فيديوهات.

Types of computers

» The shape of a computer and its components differ according to the device's model and manufacture date.

« يختلف شكل الحاسب ومكوناته حسب موديل الجهاز وتاريخ تصنيعه.

Personal Computer (PC)	Laptop	Tablet	Touch computer
			

To use your computer, you need:

- Input Devices
- Output Devices

1 Input Devices

They are devices that enter data into a computer.

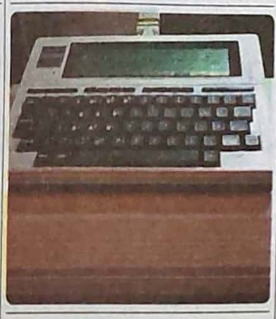
Examples of input devices:

Device	Figure	Function
1 Keyboard		To enter letters and numbers in the computer and tell it what to do. لإدخال الحروف و الأرقام للكمبيوتر وإخبار الكمبيوتر بما يجب فعله.
2 Mouse		To select and move things easily using it. لتحريك واختيار الأشياء بسهولة بواسطته.
3 Touch screen		
4 Camera		To allow others to see you. Input (image and video) السماح للآخرين برؤيتك.
5 Microphone		To allow others to hear you and input sound or audio. السماح للآخرين بسماعك وادخال صوت.
6 Scanner		It enters texts or images from paper to your computer. إدخال النصوص أو الصور إلى جهاز الكومبيوتر الخاص بك.

2 Output Devices

They are the devices that output information.

Examples of output devices:

Device	Figure	Function
1 Screen		To see what you and the computer are doing. لرؤية ما تفعله أنت والكمبيوتر.
2 Braille terminal		It displays information and texts written in Braille. يقوم بعرض المعلومات والنصوص المكتوبة بنظام برايل.
3 Speaker		To hear others. (Output sound) لسماع الآخرين.
4 Speech synthesizer		It helps people with speech disabilities to communicate. This device can change text to speech. يساعد الأشخاص الذين يعانون من عدم القدرة على الكلام على التواصل. يمكن لهذا الجهاز تحويل النص المكتوب إلى كلام.
5 Printer		It outputs texts or images from your computer on a paper. إدخال النصوص أو الصور إلى جهاز الكمبيوتر الخاص بك.

You can prepare your own video or photo album using one of the applications on your device (PC - laptop - tablet) by taking a picture or a video.

يمكنك إعداد الفيديو الخاص بك أو ألبوم الصور باستخدام أحد التطبيقات الموجودة على جهازك (كمبيوتر - لابتوب - تابلت) عن طريق التقاط صورة أو مقطع فيديو.

We divide computer hardware into:

Input Devices

Type of Hardware Component	Type of Input Data
Keyboard	Letters & numbers
Mouse or touchscreen	Directional data
Microphone	Sound & music
Camera	Images or videos
Scanner	Text or images from paper

Output Devices

Type of Hardware component	Type of Output Data
Screen	Visual information: Text - image - video
Braille terminal	Text in Braille for blind people
Speaker	Audio
Speech synthesizer	
Printer	Text & images on paper

» The most important element of the computer system is you!

أنت أهم عنصر في نظام الكمبيوتر.

» Computers are only as good as the data we put in them.

أجهزة الكمبيوتر تكون جيدة فقط بجودة البيانات التي نضعها فيها.

» If the user **connects the devices wrong** or **uses them incorrectly**, the computer will produce an error, so we must be careful while connecting them.

إذا قام المستخدم بتوصيل الأجهزة بشكل خاطئ أو استخدامها بشكل غير صحيح سوف يحدث عطل للكمبيوتر لذلك يجب أن نكون حذرين أثناء توصيل تلك الأجهزة.





Exercises

1 Choose the correct answer:

1. The computer is an electronic device that is used for .... online.
   a. processing data b. writing documents c. sending emails
2. The computer's shape doesn't depend on its ....
   a. model b. software
   c. manufacture date
3. The .... is responsible for entering the data into your computer.
   a. CPU b. keyboard c. printer
4. The .... is used to copy papers inside your computer.
   a. display screen b. scanner c. printer
5. One of the devices that a word processing software needs to write is the ....
   a. speaker b. mouse c. keyboard
6. The .... is a device that allows non-verbal person to communicate.
   a. microphone b. speech synthesizer c. speaker
7. .... enables you to take audio clips out of the computer.
   a. The mouse b. The speaker
   c. The screen zoom software
8. The .... is one of the input devices of the computer hardware components.
   a. speaker b. printer c. scanner
9. All the following are from input devices of the computer components, except the ....
   a. screen b. microphone c. keyboard

10. .... are input devices of the computer hardware.
   a. Keyboard, mouse and speaker
   b. Camera, scanner and microphone
   c. Touch screen, speaker and printer

11. The screen is considered an .... device, while the touch screen is considered an .... device.
   a. output - output   b. output - input   c. input - input

12. .... is used to select, insert or drag a file on the computer.
   a. mouse   b. printer   c. scanner

13. The .... allows you to enter a sound to your computer.
   a. speech synthesizer   b. speaker   c. microphone

14. The .... is used to input texts and images from paper.
   a. screen   b. scanner   c. printer

15. The .... is used to output texts and images on paper.
   a. screen   b. scanner   c. printer

2 Put (✓) or (✗):

1. Input devices in computers work on processing data. ( )
2. Non-verbal people use speech synthesizers to use the computer. ( )
3. The scanner is used to print images from the computer on paper. ( )
4. The keyboard is a device that is used to input data. ( )
5. We use scanners to transfer texts and images from paper to our computer. ( )
6. A laptop is bigger than a personal computer. ( )
7. The personal computer converts information into data. ( )
8. Braille terminals and speech synthesizers help people of determination to use computers. ( )
9. You are the main component of using a computer. ( )
10. The microphone is very important to hear audio or video. ( )

3 Complete the following sentences:

1. The computer is an .... device that is used for .... data, write ...., send .... online and create .... or ....
2. The shape of the computer and its .... depend on .... and ....
3. To use a computer, you need .... to tell the computer what to do and you need .... to show you what the computer is doing.
4. When using a computer, you need .... to hear others, while you need ...., so others can hear you.
5. As we enter .... into a computer system using the keyboard, the computer system gives us .... on the ....
6. We can divide the computer hardware into .... and ....
7. ...., ... and .... are input devices, while ...., ... and .... are output devices.
8. .... is used to input texts and images from paper, while .... is used to output them on paper.

4 Complete the following sentences with the suitable words between brackets:

(scanner - screen - speaker - camera - keyboard - microphone)

1. A .... enables you to enter your photo at the present.
2. A .... enables you to enter the sound into the computer.
3. A .... enables you to write letters and numbers.
4. A .... displays information (texts, photos & videos).
5. A .... is used to input texts and images from paper into the computer.
6. A .... is used to output audio data.

5 Cross out the odd word:

1. Keyboard - Printer - Camera - Scanner (..................)
2. Touch screen - Speaker - Microphone - Screen (..................)
3. Speech synthesizer - Braille terminal - Speaker (..................)

6 Classify these words into input or output devices:

(Speech synthesizer - Touch screen - Speaker - Camera - Keyboard - Printer)

Input Devices	Output Devices
....	....
....	....

7 Choose from column (A) what suits it in column (B):

Column (A) Hardware	Column (B) Function
1 Keyboards	a. output audio data
2 Speakers	b. view visual data as images.
3 Screens	c. output texts and images.
4 Printers	d. input letters and numbers.

1 .... 2 .... 3 .... 4 ....

8 Read the description below and answer the following question:

Devices can also include components that help people of determination.

Write the name of the component.

1. This component allows blind people to use computers. (..................)
2. This component allows non-verbal people to speak. (..................)

School Book Questions

Answered in the Guide Answers

1 Label the components of the computer with the words in the box:

Keyboard - Mouse - Printer - Scanner - Screen - Speaker



1 .... 2 .... 3 ....

4 .... 5 .... 6 ....

2 What is the component of the computer which does this function:

Functions	Components
1 Allows interaction with, and selection of, information.	....
2 Displays visual data: texts, images and videos.	....
3 Allows input of images.	....
4 Allows input of text.	....
5 Allows input of text and images from paper.	....
6 Allows output of text and images on paper.	....
7 Allows input of audio.	....
8 Allows output of audio.	....

Issues and Challenges

3 Look and write:

Devices can also include components to help people of determination. Read the descriptions below and write the name of the component. Then answer the question.

1. This component allows blind people to use computers.

....

2. This component allows non-verbal people to speak.

....

4 Think and write:

What other computer components might be helpful for people of determination? How can they help?

....

ICT and Me

5 Think and answer:

Read the questions below and think about your family, your home and your school. Discuss your answers with a partner and then write.

1. Do your family and friends use computers? What do they use them for?

....

2. When might you use the following components on a device?

Camera: ....

Microphone: ....

Speaker: ....

3. Which component do you think is more useful: a printer or a scanner? Why?

....

4. Many modern electronic devices have very small computers or computer components in them! For example, many new cars have computer components which can tell the driver if there is a problem with the engine. Can you think of some other devices which aren't computers but use computer components?

....

Lesson 4

Software and Operating Systems

Computer Components

1 Hardware

<u>IT includes:</u>

1. Input devices.
2. Output devices.
3. CPU



2 Software

<u>IT includes:</u>

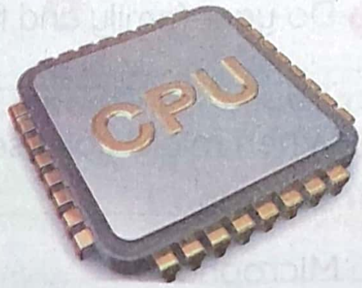
1. Operating system.
2. Other programs (applications).



CPU

» Central Processing Unit (CPU) is like the brain in the human body and it processes data and converts it to useful information.

« وحدة المعالجة المركزية كالعقل في جسم الإنسان وهي تقوم بمعالجة البيانات وتحويلها إلى معلومات مفيدة.





Software



- They are programs and applications that help the user to perform any task he needs and they include:
  1. Operating system.
  2. Programs (applications).

هي برامج وتطبيقات تساعد المستخدم على أداء أي مهمة يحتاجها وهي تشمل: 1- نظام التشغيل 2- البرامج (التطبيقات).

1 Operating System



- The operating system software enables you to use your computer.
- Windows and Android are considered some of the most famous operating systems.
- The operating system sends commands to the central processing unit (CPU) which is one of the components of a computer.

- يمكّنك برنامج نظام التشغيل من استخدام جهاز الكمبيوتر الخاص بك.
- يعتبر الويندوز والأندرويد من أشهر نظم التشغيل.
- يرسل نظام التشغيل الأوامر إلى وحدة المعالجة المركزية والتي تعد أحد مكونات الكمبيوتر.





2 The Most Important Applications

MS Word	MS Excel	MS PowerPoint	Google Chrome
It helps us to write texts or documents. يساعدنا على كتابة تقارير أو وثائق.	It helps us to design spreedsheets. يساعدنا على تصميم الجداول البيانية.	It helps us to design a presentation (presents information) يساعدنا على تصميم العروض التقديمية.	It helps us to browse any website on the internet. (online) يساعدنا على تصفح أي موقع على الإنترنت.

The diagram below shows how data is processed in Microsoft Word

1. A student writes in Microsoft Word.
2. The operating system sends data to the CPU.





3. The CPU processes the data.
4. The CPU sends information to the operating system.
5. The operating system receives the information and shows it on the screen.



Exercises

1 Choose the correct answer:

1. .... is considered software for the personal computer.
   a. Keyboard b. Windows c. Screen

2. .... is considered of the hardware components of a computer.
   a. CPU b. Browser c. Android

3. .... is considered the door to the internet that enables you to search for any information.
   a. PowerPoint b. Google Chrome c. Microsoft Word

4. .... is a great tool that enables you to create your CV.
   a. PowerPoint b. Google Chrome c. Microsoft Word

5. .... can be an effective tool to present material in the classroom and encourage student learning.
   a. Excel b. PowerPoint c. Google Chrome

6. The function of the central processing unit (CPU) is to ....
   a. change information to useful data
   b. change bad information to useful information
   c. change data to useful information

7. .... sends data to the CPU then receives it in a form of information.
   a. Windows b. Browser c. Keyboard

8. All the following are from the operating systems that enable you to use computers, except ....
   a. Windows b. email c. Android

2 Write the scientific term:

1. It sends commands to the central processing unit (CPU). (..........)
2. It processes data and converts it to useful information. (..........)
3. It is considered the main tool for accessing websites. (..........)
4. An application that allows you to design business documents. (..........)
5. An application that allows you to present information and videos. (..........)

3 Put (✓) or (✗):

1. The central processing unit (CPU) is a type of software. ( )
2. Word processing software is a type of device. ( )
3. The operating system is not necessary for dealing with a computer. ( )
4. Microsoft PowerPoint helps you present information in creative ways. ( )
5. The software helps in controlling processing data so the user can reach information. ( )
6. The CPU sends commands to the operating system to translate them. ( )
7. The operating system is considered a software component, while the CPU is considered a hardware component. ( )
8. Google Chrome enables you to download any file from any website offline. ( )
9. Screen and keyboard help you to operate your personal computer. ( )
10. Android is one of the most famous operating systems. ( )

4 Classify these words into the following table:

(Word - Speech synthesizer - Google chrome -
Touch screen - Windows - Speaker - Camera - Keyboard -
Printer - PowerPoint - Android)

Hardware		Software	
Input Devices	Output Devices	Operating System	Applications
....	....	....	....
....	....	....	....

5 Cross out the odd word:

1. Windows - CPU - Android (....................)
2. Keyboard - Google Chrome - Speaker (....................)
3. Screen - Microsoft Word- PowerPoint (....................)

6 Arrange the following stages:

1. The operating system sends the image data to the CPU. ( )
2. The CPU converts data into information. ( )
3. The student places an image in Microsoft PowerPoint. ( )
4. It displays it on the screen. ( )
5. The CPU is processing the image data. ( )
6. The CPU sends information to the operating system. ( )

7 Complete the following diagram with the words in the box:

Data - Output device - Input device - CPU - Information

.... —(....................)→ .... —(....................)→ ....

School Book Questions

Answered in the Guide Answers

1 Look and complete:

Write the words from the box in the correct column.

CPU - Gaming apps - Google Chrome™ browser - Keyboard
PowerPoint® - Microsoft Word® - Screen - Windows®

Hardware	Operating Systems	Application Software
....	....	....

2 Read the steps and match them to the image. Write the letter:


a


b


c



d

1. You open the program and start typing. ( )
2. The program receives the data and tells the operating system to interpret it. ( )
3. The CPU receives the data from the operating system and processes it. ( )
4. After the operating system sends the information to the program, the program puts the information on the screen. ( )

ICT and Me 3 Think and draw:

You are playing a game on your computer. Draw and label the relationship between you, the game application, the operating system, and the CPU.

4 Think and answer:

Imagine you are transported back in time to before computers (PCs, laptops) were invented! How would you explain the importance of a computer, how this technology spread and how it works?

Lesson 5

Supporting People of Determination

Assistive Technology • A special kind of technology that helps people of determination with tasks that they find difficult to do.

نوع خاص من التكنولوجيا يساعد أصحاب الهمم في المهام التي يجدون صعوبة في القيام بها

Albert Lin



» Albert Lin has a limb difference, but that doesn't stop him from explorinng many places around the world.

« لدى ألبرت لين فرق في أطرافه ولكن هذا لم يمنعه من استكشاف العديد من الأماكن حول العالم.

» Albert Lin uses a prosthetic leg that enables him to move and explore new places.

« يستخدم ألبرت لين ساقًا صناعية تمكنه من التحرك واستكشاف أماكن جديدة

Stephen Hawking



» Stephen Hawking was a physics scientist.

« ستيفن هوكينج كان عالمًا في الفيزياء.

» He used a robotic wheelchair to move which was equipped with a system that enabled him to talk.

« كان يستخدم كرسيًا متحركًا آليًا للتنقل ومجهزًا بنظام يمكّنه من التحدث.

Examples of Assistive Technology

1 Hearing aids

» They help people who have trouble hearing.

يساعد الأشخاص الذين يعانون من مشاكل في السمع.



» They can be connected to a user's mobile phone now.

يمكن الآن توصيله بالهاتف المحمول للمستخدم.

» Many of them include applications that allow users to adjust them from their mobile phones.

يشتمل على تطبيقات تتيح للمستخدم التحكم بها من خلال الهاتف المحمول.

2 Screen magnification software

- It enlarges everything such as text and images on the screen of a computer. يكبر كل شيء مثل النصوص والصور على شاشة الكمبيوتر.
- It allows visually impaired people to interact with computers. يسمح للأشخاص ضعاف البصر بالتفاعل مع الكمبيوتر.



3 Alternative communication software

- It helps people with speech and language disabilities to communicate with others. يساعد الذين يعانون من إعاقة في النطق أو اللغة على التواصل مع الآخرين
- Some computer programs can change text to speech and vice versa.

يمكن لبعض برامج الكمبيوتر تغيير النص إلى كلام والعكس صحيح.



4 Braille method

- It helps blind people to read with touch by converting letters into raised symbols.

تساعد الأكفّاء بالقراءة باللمس عن طريق تحويل الحروف إلى رموز بارزة.



5 Prosthetic devices

- They help people who have lost their limbs to move. (People with movement difficulties)

تساعد الأشخاص الذين فقدوا أطرافهم على الحركة.


Wheelchair


Crutches (canes)


Electric elevator



6 Sporting tools

- Paraclimbing tools
- Running tools
- A football that makes noise
- A bike with three wheels operated by hand

أدوات التسلق - أدوات الجري - كرة القدم التي تصدر ضوضاء - دراجة بثلاث عجلات تعمل باليد



Exercises

1 Choose the correct answer:

1. Albert Lin is a/an ....
   a. doctor b. architect c. archaeologist
2. .... had a robotic wheelchair that enabled him to move.
   a. Albert Lin b. Stephen Hawking c. Anika Ullah
3. Prosthetic legs and wheelchairs help people with ....
   a. hearing troubles b. movement disabilities c. poor vision
4. Screen magnification software is very important for ....
   a. blind people b. deaf people
   c. visually impaired people
5. Alternative communication software helps people with .... disabilities.
   a. speech b. movement c. seeing
6. .... is a way to convert letters into raised symbols that can be read by touch.
   a. Smartphone b. Touch screen c. Braille method
7. People who have hearing troubles can use .... to interact with a computer.
   a. speaker b. hearing aids c. synthesizer
8. The .... can change text to audio and vice versa.
   a. speaker b. microphone
   c. alternative communication software
9. A football that makes noise is useful for ....
   a. people with hearing troubles
   b. people with movement disabilities c. visually impaired people
10. Which of the following is useless for visually impaired people?
    a. Motorized wheelchair b. Cell phone with large button
    c. Screen magnification software
11. Screen magnification software enables ....
    a. showing information b. hearing information
    c. printing papers
12. .... help people with limb difference to go about their daily lives.
    a. Hearing aids b. Prosthetic legs c. Braille terminal

2 Write the scientific term:

1. The kind of technology that helps people of determination.(.............)
2. A tool that helps people who have trouble hearing to hear. (.............)
3. A tool that helps blind people to read. (.............)
4. A tool on the computer that enables visually impaired people to see. (.............)
5. A tool that helps people who lost one of their limbs. (.............)
6. It helps people with speech and language disabilities to communicate. (.............)

3 Who might find these assistive technological tools more useful?

1. Sport balls that make noise. (.............)
2. Cell phones with large buttons. (.............)
3. Medical hearing aids. (.............)
4. Screen magnification software. (.............)
5. Motorized wheelchair. (.............)

4 Put (✓) or (✗):

1. Assistive technology is technology that helps people of determination go about their daily lives. ( )
2. Albert Lin uses a prosthetic leg that enables him to talk and communicate. ( )
3. Stephen Hawking used a robotic wheelchair to move which was equipped with a system that enabled him to talk. ( )
4. Screen magnification software helps people with hearing trouble.( )
5. Braille transforms letters into raised symbols that can be read by touching. ( )
6. Medical hearing aids include applications that allow users to adjust then from their mobile phone. ( )
7. Alternative communication software allows visually impaired people to interact with a computer. ( )

8. Some computer programs can change text to speech and vice versa. ( )
9. A bike with three wheels operated by hand can help a person with limb difference to move. ( )
10. Our deaf sisters can use technological tools, such as speech synthesizers. ( )

5 Complete the following sentences:

1. People of determination use different kinds of .... technology.
2. Albert Lin has a ...., but that doesn't stop him, so he uses .... that enables him to move and explore new places.
3. Stephen Hawking used a .... to move which was equipped with a system that enabled him to ....
4. .... allows non-speaking people to speak and communicate with others.
5. People who lose their sight need .... to read, while people who have poor vision can use .... to read.
6. .... players can use a ball that makes noise.
7. .... has 3 wheels and is powered by your hands.
8. .... allow climbers to climb mountains.

6 Choose from column (A) what suits it in column (B):

Column (A) People of determination	Column (B) Can use
1 Blind person	a. Screen magnification software
2 People with hearing disabilities	b. Prosthetic device
3 Visually impaired person	c. Alternative communication software
4 Person with language disability	d. Medical hearing aids
5 Person with a limb difference	e. Braille method

1 .... 2 .... 3 .... 4 .... 5 ....

School Book Questions

Answered in the Guide Answers

1 Discuss in pairs:

We all use technology every day. Look at the technologies below and circle the ones which you have used today. What did you use them for? Discuss with a partner.


A light pen


Glasses

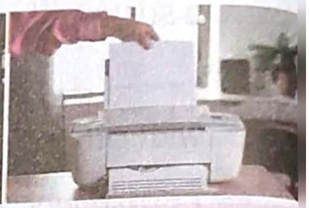

A computer


An elevator


A cell phone


A car


A ball


A printer

Issues and Challenges 2 Think and answer:

How can each of these assistives technologies be useful for people? Who might find them most useful?

1. Sports balls that make a noise

   ....

2. Cell phones with large buttons

   ....

3. Hearing aids

   ....

4. Screen magnification software

   ....

5. Motorized wheelchairs

   ....

3 Read and complete:

Put these steps in order. How did Stephen Hawking make use of Speech synthesizer technology?





1. When I have made a sentence, the computer sends it to a speech synthesizer. (   )
2. I look at a screen. There are words on the screen. (   )
3. I can press a switch in my hand. In this way, I select the words. (   )
4. The speech synthesizer changes the words into an artificial voice, so people can hear what I want to say! (   )
5. I can't speak so I communicate using a computer system in my wheelchair (   )

ICT and Me 4 Think and answer:

People of determination can have difficulty doing some tasks, but assistive technology can help them enjoy the same activities as everyone else.

Read and answer the questions.

1. What are three things that you enjoy doing?

....

2. Why might this activity be difficult for a person of determination?

....

3. What kinds of technology might help a person of determination to do this activity?

....

Lesson 6

Common ICT Problems and Solutions

Sometimes your computer has a temporary breakdown that prevents you from turning it on or using it.

في بعض الأحيان، يعاني جهاز الكمبيوتر الخاص بك من عطل مؤقت يمنعك من تشغيله أو استخدامه.



Examples of technological problems and solutions

Problem 1 An App Won't Open

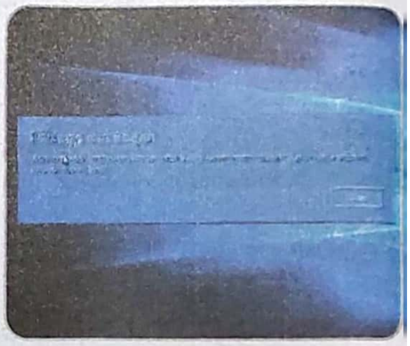
Solution

- Restart your computer and try again.

  ↓ If the problem is not solved,
- check that your software is up to date.

  ↓ If the problem is not solved,
- uninstall it and reinstall the app.

  ↓ If the problem is not solved,
- ask your teacher or family for help.



Problem 2 Your Screen Freezes

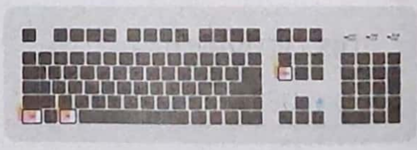
Solution

- Press and hold the "Ctrl + Alt and Del" buttons together.

  ↓ If the problem is not solved,
- try to power off your computer and restart.

  ↓ If the problem is not solved,
- ask your teacher or family for help.

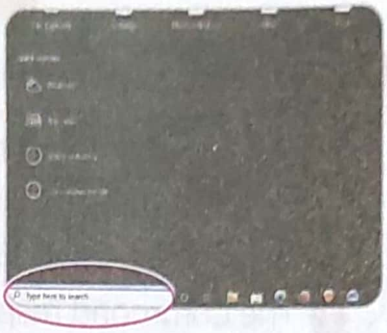




Problem 3 You Can't Find a File

Solution

- Check your Downloads folder.
  - If you're looking for a Microsoft Word file, look in your Documents folder.
  - If you're looking for a photo, look in your Pictures folder.



Or

- try doing a search using the search box next to the Start button.

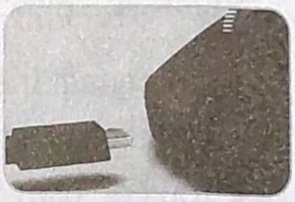
↓ If the problem is not solved,

- ask your teacher or family for help.

Problem 4 The Mouse Cursor Isn't Working

Solution

- Check that the mouse cable is connected to the correct place in the motherboard, then restart your device.



↓ If the problem is not solved,

- replace the mouse because it might have a defect.

↓ If the problem is not solved,

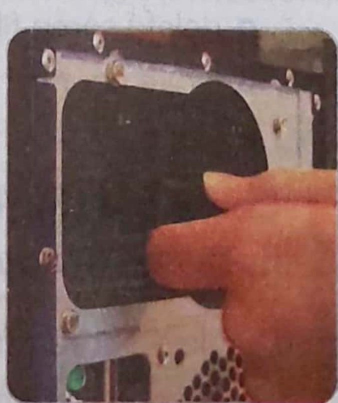


- ask your teacher or family for help.

Problem 5 The Keyboard Isn't Typing

Solution

- Check that the keyboard cable is connected to the correct place to the motherboard, then restart your device.



↓ If the problem is not solved,

- replace the keyboard because it might have a defect.

↓ If the problem is not solved,

- ask your teacher or family for help.

Exercises

1 Choose the correct answer:

1. If you want to find a file in your PC, you should ....
   a. restart the device b. press on Del + Alt + Ctrl
   c. use the Search box
2. The command responsible for closing all the applications on personal computers or laptops is ....
   a. Del+Alt+Ctrl b. Alt+Del+Tab c. Del+Tab+Shift
3. When there's a problem opening one of the apps on your computer, you might need to ....
   a. restart your device b. replace the mouse c. replace the keyboard
4. It is preferable after repairing or reconnecting the mouse to ....
   a. connect the power charger to the device
   b. check electrical connections c. restart the device
5. You can use .... to write school reports and homework.
   a. MS PowerPoint b. MS Word c. MS Excel
6. The following options are possible to solve a keyboard malfunction, except ....
   a. replacing the keyboard
   b. checking the keyboard connection c. pressing F5 button
7. When you are unable to solve a problem on your computer, you must ....
   a. delete some files from the computer
   b. leave your computer for a while
   c. ask your teacher or family to help you

2 Complete the following sentences using the suitable words between brackets:

(find a file - screen freezes - app won't open - pointer doesn't work)

1. Press and hold the "Ctrl", "Alt" and "Del" buttons when ....
2. Uninstall and reinstall the app when the ....

3. Do a search using the Search box next to the Start button to ....
4. Check the mouse connection to the motherboard when the ....

3 Put (✓) or (✗):

1. The temporary breakdown of your computer allows you to use it. (   )
2. If the app still won't open, check that your software is up to date. (   )
3. Removing the Word program from your device helps solve most problems. (   )
4. If you can't find a file, you should restart your computer. (   )
5. Press Del + Alt + Ctrl if the mouse is not activated. (   )
6. Using the Search box helps you find any file on your PC. (   )
7. The first thing you should do when you have a problem with your computer is ask to your teacher for help. (   )
8. It is better to restart your computer after checking the keyboard connection. (   )

4 Complete the following sentences:

1. When an app won't open, you can .... your computer and try again, if the problem continues, you have to check that the software is ....
2. Press and hold the .... buttons together when the screen freezes.
3. If you want to find a file on your computer, you can use the .... next to ....
4. If the mouse cursor isn't working, you have to check that the mouse .... is connected to the correct place in the ...., then .... your device.
5. Uninstall and reinstall the app when ....

5 Decide what the problem is, based on the solution provided:

1. Press and hold the "Ctrl", "Alt", and "Del" buttons. (........)
2. Do a search using the Search box next to the Start button. (........)
3. Restart your computer and try opening it again. (........)
4. Uninstall and reinstall the app. (........)

School Book Questions

Answered in the Guide Answers

Comprehension

1 Look and complete:

Decide what the problem is based on the solution provided.

Solution	Problem
1 Press and hold the "Ctrl", "Alt", and "Del" buttons.	....
2 Do a search using the Search box next to the Start button.	....
3 Restart your computer and try opening it again.	....
4 Uninstall and reinstall the app.	....

2 Read and answer:

Suggest solutions to these ICT problems.

1. Sara is doing her homework on her Windows® PC. Suddenly, the screen freezes. She presses and holds the "Ctrl", "Alt", and "Del" buttons, but that doesn't work. What else could she try to do?
2. Maged wants to send a file to his friends, but he can't find it on his Windows® PC. What solutions could he try?
3. Reem wants to listen to music on her favorite music app on her laptop. However, when she clicks on it, it doesn't open. What solutions could she try?

ICT and Me

3 Think and answer:

Write about an ICT problem that you experienced before. How was it solved?

4 Think, draw and answer:

1. Invent your own device! What does it look like? Draw a picture of it.
2. What does it do? Write a short description.
3. What are possible problems that someone using your device might experience?
4. How can the problems experienced be solved?

Lesson 7

Collecting, Analyzing and Graphing Data



» Scientists and archaeologists can solve problems by **collecting**, **analyzing** and **graphing** data.

« يقوم العلماء وعلماء الآثار بحل المشكلات عن طريق قيامهم بجمع البيانات وتحليلها ورسمها البياني.

1 Collecting Data

You can collect data from some sources, such as:

- books & articles (digital or print).



- records (logs & reports).



- surveys.



- experiments.



« **يمكنك جمع البيانات من بعض المصادر مثل:**

- كتب ومقالات (رقمية أو مطبوعة)
- التسجيلات (السجلات والتقارير)
- الدراسات الاستقصائية
- التجارب

Always make sure that the information you are collecting is accurate and from reliable sources.

تأكد دائمًا من أن المعلومات التي تجمعها دقيقة ومن مصادر موثوقة.

2 Analyzing Data



<u>**When you analyze the data that you collected:**</u>

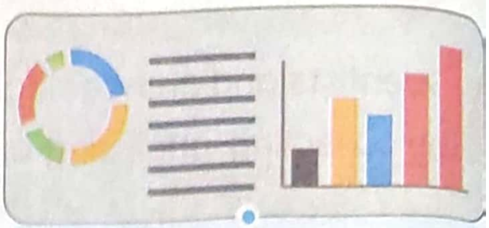
1. You must review your findings.
2. You must interpret what those findings mean.
3. You may have a lot of data, so look for trends (recuring patterns) in the information.

« عندما تقوم بتحليل البيانات التي جمعتها:

- قم بمراجعة تلك البيانات
- قم بتفسير تلك البيانات
- قد يكون لديك الكثير من البيانات؛ لذا ابحث عن الأنماط المتكررة في المعلومات.

3 Graphing Data



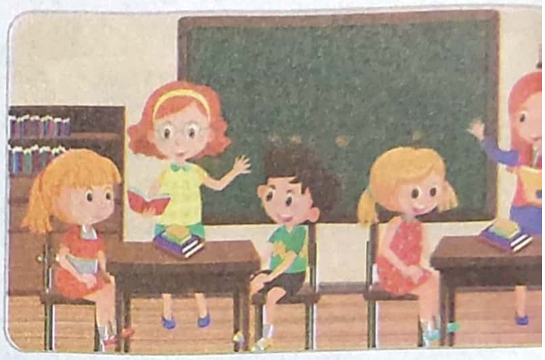



1. A common graph is a **bar graph**.
2. You can draw it on a paper or on a computer using **Excel**.
3. *Bar graphs:* It clearly compares different categories of information.

- الرسم البياني الشائع هو الرسم البياني العمودي.
- و يمكنك رسمه على ورقة أو على جهاز كمبيوتر باستخدام برنامج إكسيل.
- الرسم البياني العمودي: يعرض بوضوح ويقارن فئات مختلفة من المعلومات.

Example:

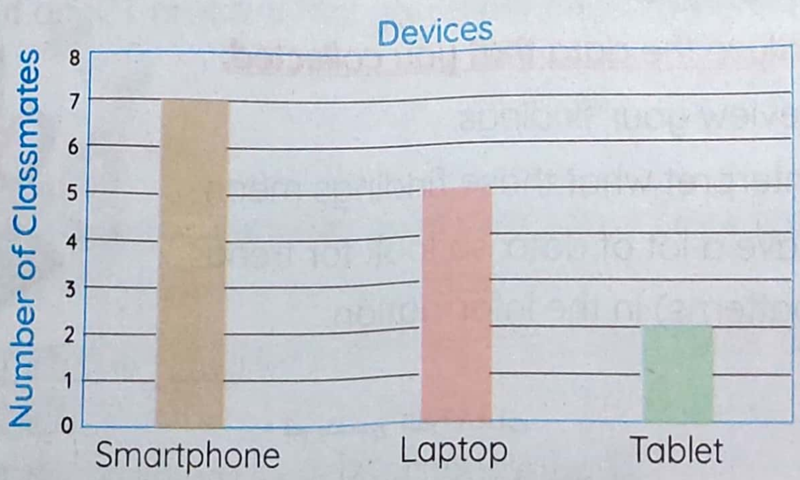
Nesma interviewed her classmates about what their favorite devices were. In total, she interviewed 14 classmates, she collected their answers and sorted them into groups.



This is the information that she analyzed

- Seven classmates said their favorite device was a smartphone.
- Five classmates said their favorite device was a laptop.
- Two classmates said their favorite device was a tablet.

After Nesma analyzed the information, she graphed it:



Exercises

1 Choose the correct answer:

1. The first step of solving any problem is .... the data.
   a. graphing   b. collecting   c. analyzing
2. Scientists and archaeologists can .... to solve problems.
   a. search   b. write   c. read
3. Inside a science lab, we do a lot of .... with our teacher to collect data.
   a. surveys   b. interviews   c. experiments
4. The students can do .... inside the class to collect data about their favorite technology tools.
   a. surveys   b. interviews   c. experiments
5. You can use .... whether they are printed or digital to collect Data.
   a. surveys   b. books   c. interviews
6. The best way to collect information is getting it from ....
   a. Facebook   b. books   c. WhatsApp
7. The best way to interpret a lot of data is to look for ....
   a. records   b. surveys   c. trends
8. .... is the best software that can be used to analyze data.
   a. MS Word   b. MS Excel   c. MS PowerPoint
9. When you analyze the data you've collected, you review your ....
   a. data   b. information   c. findings
10. Once you have analyzed the information you have collected, you're ready to graph the ....
    a. data   b. information   c. findings
11. Before you show your results on charts, you should ....
    a. share it online with others   b. analyze them
    c. remove them
12. .... graph is the most common graph to present information.
    a. Bar   b. Pie   c. Line

2 Put (✓) or (✗):

1. When preparing a research, you must ensure that the information you have collected is correct. ( )
2. Surveys and experiments are the most important sources of data collection. ( )
3. To reach accurate search results, you must use social media sites. ( )
4. You can follow the steps of collecting, analyzing, and expressing data in graphs to create a survey for your classmates about their favorite sports. ( )
5. You can't make graphs on paper, but you can create them with Excel only. ( )
6. Software applications are used to collect the data and are not used to analyze and express them into a graph. ( )
7. It is better to extract recurring patterns from the data to be able to analyze it. ( )
8. The data is analyzed in order to organize it in a graph. ( )

3 Complete the following sentences:

1. Scientists and archaeologists can solve problems by ...., ... and .... data.
2. You can collect data from some sources, such as ...., ... and ....
3. Always make sure that the information you are collecting is .... and from .... sources.
4. We can do .... in a science lab to collect reliable data.
5. During analyzing the .... you collected, you must review your .... then .... it.
6. You may have a lot of data, so look for .... in the information.

7. .... graph is the most common graph that compare .... and ....

8. You can draw a chart after .... data on a .... or using .... program.

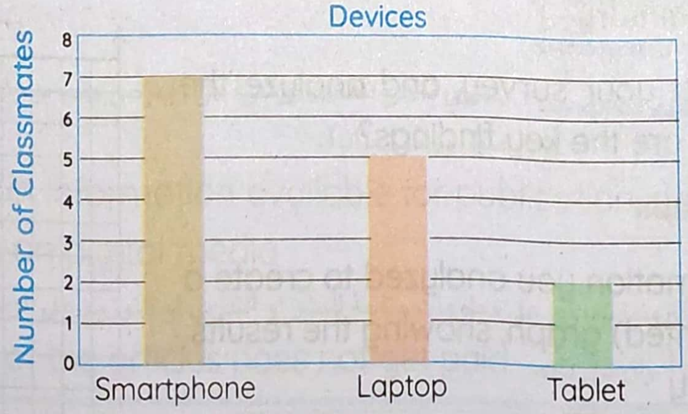
4 Complete the following sentences with the suitable words between brackets:

(Excel - paper - Analyzing - Bar - data collection)

1. .... graph is the most common graph to compare different information.
2. .... is one of the most popular applications for designing graphs.
3. You can draw graphs on a ....
4. During ...., you must ensure that the information is accurate.
5. .... data is very important before drawing a chart.

5 Look at the following graph, then answer the questions:

Nesma interviewed her classmates about what their favorite devices were. In total, she interviewed 14 classmates, then she collected their answers and graphed them.



1. What is the type of this graph? ....
2. What is the application that Nesma used? ....
3. What is the highest category? ....
4. What is the lowest category? ....
5. What is the difference between the highest category and the lowest category? ....

School Book Questions

Answered in the Guide Answers

Comprehension 1 Look, circle and write

There are a variety of sources you can use to collect data, or gathe information. Look at the types of sources below and circle the ones yo have used.

a. Books b. Articles c. Reports d. Surveys
e. Experiments f. Interviews g. Other: ....

2 Think and answer

Were the sources you circled above in digital, print, or both?

Research 3 Think and answer

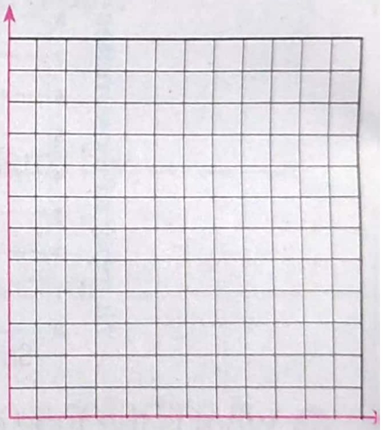
Let's take a survey! First, prepare your survey with your teacher's help.

1. What will be the subject of your survey?
2. How will you present your information?
3. Choose friends, family members, or classmates to answer your surve questions. List the people you will speak to below.
4. Write the questions you will be including in your survey.

4 Write a summary

Next, conduct your survey, and analyze the results. What are the key findings?

5 Make a graph



Use the information you analyzed to create a (digital or printed) graph, showing the results of your survey

ICT and Me 6 Think and answer:

Digital tools are useful when it comes to collecting, analyzing, and graphin data. Which of the following programs do you think are best for analyzin data? Why?

1. A word processor (e.g. Microsoft Word®)
2. Presentation software (e.g. PowerPoint®)
3. A spreadsheet (e.g. Excel®)

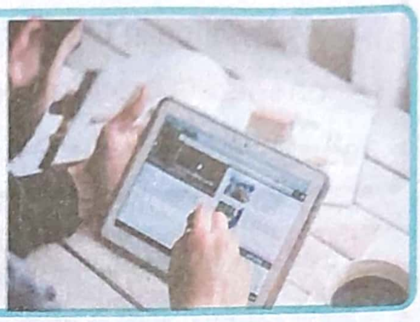
Lesson 8

Reporting Findings

» Researchers report the information they gather in many different ways. يعلن الباحثون عن المعلومات التي يجمعونها بعدة طرق مختلفة

Some ways of archaeologists report their information
الطرق التي يقوم بها علماء الآثار بالإبلاغ عن معلوماتهم

1 Digital blogs المدونات الرقمية



» A website that contains **personal notes** and opinions. موقع يحتوي على مذكرات وآراء شخصية.

» **Only one person** is responsible for it. يكون المسئول عنها فرد فقط.

2 Digital published articles مقالات رقمية منشورة



» Some of digital articles contain **texts** only, while some include **images** and **infographics**.
تحتوي بعض المقالات الرقمية على نصوص فقط بينما يشتمل بعضها على صور ورسوم بيانية.

» They contain information available for publication, download or distribution on digital media
هى نصوص منشورة الكترونيا تحتوى على معلومات متاحة للنشر او التنزيل او التوزيع على الوسائط الالكترونية.

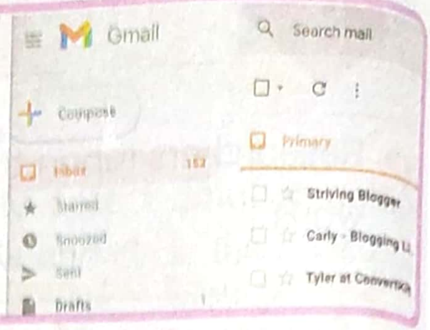
» The author of the articles does not get paid. لا يتقاضى مؤلف المقالات أموال على ذلك.

3 Social media sites وسائل التواصل الإجتماعي



» It is the digital communication among people via internet that allows sharing **texts, photos or videos**.
هو الاتصال الرقمي بين الناس عبر الإنترنت الذى يسمح بمشاركة النصوص أو الصور أو مقاطع الفيديو.

4 Email البريد الإلكتروني



- The **most common way** to report data.
  الطريقة الأكثر شيوعًا للإبلاغ عن البيانات
- You can send **a short report** and **attach a file with it**.
  يمكنك إرسال تقرير قصير وإرفاق ملف به

5 TV programs برامج التلفزيون



- These are meetings that present **opinions** and information in the form of television talk shows on **satellite broadcasting channels**.
  هي لقاءات تعرض الآراء و المعلومات في شكل حوار على قنوات البث الفضائي.

6 Interviews المقابلات



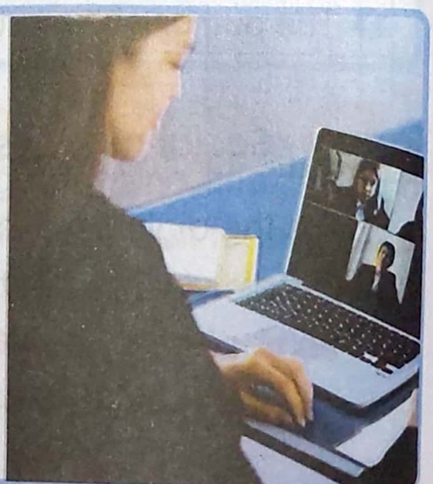
- **A face-to face conversation** between two or more people to obtain information.
  محادثة بين شخصين أو أكثر للحصول على معلومات.

7 Text messages رسائل نصية



- Communication among people using short text messages (**SMS**) via the internet.
  اتصال بين الأشخاص باستخدام الرسائل النصية القصيرة عبر الإنترنت.

8 Video chats محادثات فيديو



- Communication among people using video through some applications (**Messenger** - **WhatsApp** - **Skype**).
  اتصال بين الأشخاص باستخدام الفيديو من خلال بعض التطبيقات.
- You need **a camera** and **a microphone** to communicate with others.
  سوف تحتاج إلى كاميرا وميكروفون للتواصل مع الآخرين.

Exercises

1 Choose the correct answer:

1. .... is used to express your personal opinions on the internet.
   a. GPS b. Digital blog c. Email
2. One of the attached devices that you use during video calls is the ....
   a. printer b. scanner c. camera
3. Personal information and opinions that express their owner which are available for reading and downloading in various sites are ....
   a. published articles b. Emails c. text messages
4. .... is responsible for blogging.
   a. No person b. One person c. A group
5. .... are used to communicate with audio and images.
   a. Video calls b. Digital articles c. Digital blogs
6. .... contain information available for publication, download or distribution on digital media sites.
   a. Text messages b. Published articles c. Digital blogs
7. .... is a way to report information in a face-to-face conversation.
   a. Blogging b. Social media c. Interview
8. .... is a way to report information by writing posts and comments online.
   a. Video chat b. Social media c. Interview
9. .... is communication among people using SMS online.
   a. Video chat b. Social media c. Text message
10. The camera and microphone are used in ....
    a. published articles b. text messages c. video calls
11. .... is a way of exchanging messages between a team.
    a. Blogging b. Email c. Text message
12. A way to report information through talk shows, is called ....
    a. TV programs b. interviews c. video chat

2 Complete the following sentences with the suitable words between brackets:

(Social media sites - Video chats - Interviews - TV programs - Blogs - Emails - Published digital articles - Instant messages)

1. .... are visual communication online using a webcam and microphone.
2. .... are the most common ways to send data and attach related files.
3. .... are face-to face conversations between two persons to get information.
4. .... are communication among people using short text messages online.
5. .... are meetings that present information in the form of talk shows.
6. .... are websites that contain personal notes and opinions.
7. .... are ways to communicate by sharing posts and comments online.
8. .... contain information available for publication and download.

3 Put (✓) or (✗):

1. Researchers always have to use published articles to report their information. (
2. A blogger is someone who runs and controls a digital blog. (
3. Email is used to share posts and comments online. (
4. Reports and publications on various websites are considered sources of digital information. (
5. Social media is the best way to reach accurate information. (
6. An interview is a face-to face conversation between two or more people to obtain information. (
7. SMS is a way of communication among people offline. (
8. The most common way to report data is by sending emails. (

4 Complete the following sentences:

1. .... is a website that contains personal opinions and .... is responsible for it.
2. .... are meetings that present opinions and information in the form of a television talk shows.
3. Text messages help people communicate using .... online.
4. Some of digital articles contain .... only, while some include .... and ....
5. .... is a digital communication among people via the internet that allows sharing texts, photos or videos.
6. Video chat is a way of communication among people in .... place using .... and ....

School Book Questions

Answered in the Guide Answers

Comprehension **1** **Read, think and write:**

There are a variety of formats you can use to report findings. Below are some examples. Make notes next to each format explaining how it can be used to report finding

1. Blogs.
2. Email
3. Articles
4. Social media sites
5. Text messages
6. Video chats
7. TV programs

Research **2** **Read, think and answer:**

Online articles allow an individual or small group to express their thoughts to their audience. Some may just include text. Others will include visual media, like pictures or graphs. Create an online article using the information you gathered in the previous lesson (7). Report your findings.

To prepare:

1. Create an interesting headline for your article.
2. Who will you invite to read your article? Friends? Family? Teachers? Classmates? Explain your choices.
3. How will you get and keep your audience interested in reading your article?
4. Write notes about how you will summarize your findings.

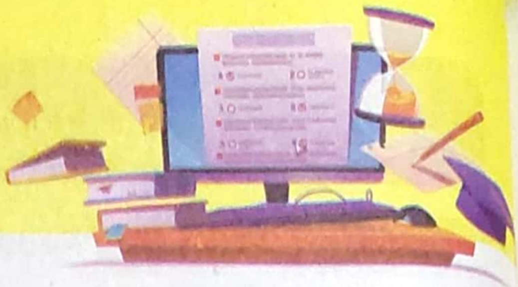
3 **Create your online article:**

Use the space below to write your online article. Don't forget to include visuals, like pictures or graphs, to help report your information.

Critical thinking **4** **Compare and contrast:**

In this lesson, you wrote an email and created an online article to report your findings. Compare and contrast the experience you had using these two methods. Include what you liked and didn't like about each method.

Revision on Theme 1



1 Choose the correct answer:

1. You want to see if there are any old coins buried underground, you will use ....
   a. GPS b. GPR c. magnetometer
2. You want to find out if there are any old buildings under the ground, you will use ....
   a. GPS b. GPR c. magnetometer
3. You receive a message from a friend who is lost and you want to try to find him, you will use ....
   a. GPS b. GPR c. drones
4. Electricity was first used during the .... Age
   a. Pre-Mechanical b. Mechanical c. Electro-Mechanical
5. The information explosion happened during the .... Age.
   a. Mechanical b. Electronic c. Electro-Mechanical
6. .... allow blind people to use computers.
   a. Speakers b. Braille terminals c. Touch screens
7. .... allow non-speaking people to speak.
   a. Speakers b. Smart microphones c. Speech synthesizers
8. The .... processes the data and sends information to the operating system.
   a. keyboard b. CPU c. software
9. The operating system receives .... and shows it on the screen.
   a. information b. data c. orders
10. Press and hold the "Ctrl", "Alt" and "Del" buttons when the ....
    a. screen freezes b. app won't open c. pointer won't work
11. You can use .... to write school reports and homework.
    a. MS Word b. MS Excel c. MS PowerPoint
12. .... is a digital tool that can be used to organize data
    a. MS Word b. MS Excel c. MS PowerPoint
13. Students do a/an .... inside the class to collect data about their favorite technology tool.
    a. experiment b. interview c. survey
14. The most common graph is .... graph.
    a. column b. bar c. line

15 .... is/are a reliable source of information.
a. Blogs   b. Wikis   c. EKB

2 Put (✓) or (✗):

1. Tourists can use GPS to know the location of historical museums. (   )
2. The global positioning system (GPS) is connected to satellites. (   )
3. Drones are used by archaeologists to get pictures of objects above the ground. (   )
4. Abacus counter is the early calculator that was used in The Mechanical Age. (   )
5. Hieroglyphics were used by ancient Egyptians in The Pre-Mechanical Age. (   )
6. Books began to appear in the mechanical revolution era. (   )
7. The Electronic Age extends to our present age. (   )
8. The keyboard is a device used to output data. (   )
9. You are the main component of using a computer. (   )
10. The central processing unit (CPU) is a type of software. (   )
11. Albert Lin uses a prosthetic leg that enables him to talk and communicate. (   )
12. Braille transforms letters into raised symbols and can be read by touching. (   )
13. Press "Del" + "Alt" and "Ctrl" if the mouse is not activated. (   )
14. Surveys and experiments are the most important sources of data collection. (   )
15. Social media is the best way to reach accurate information. (   )

3 Classify the following words in the tables:

(Screen - Camera - Braille Terminal - Scanner - Microphone - Keyboard - Speaker - Mouse - Printer - Touch screen - Speech Synthesizer)

Input Devices	Output Devices
....	....

(CPU - Gaming apps - Google Chrome Browser - PowerPoint - Screen - Keyboard - Windows - Microsoft Word)

Hardware	Operating System	Application Software
....	....	....

School Book Questions

On Theme 1

Answered in the Guide Answers

Vocabulary 1 Write and compare:

Write a sentence for each set of words to explain the connection between them. Then, compare your sentences with a partner.

1. Keyboard and screen
2. Operating system and CPU
3. Survey and graph

Review Questions 2 Read and answer:

1. Name two tools that archaeologists can use to explore the Earth.
2. During which Age was electricity first used?
3. Write three devices that you would likely use during a video chat.
4. What is assistive technology? Write one example.
5. What is application software? Write one example.
6. Identify a common ICT problem, and one way it can be resolved.
7. What is the best way to interpret a lot of data?
8. Write three ways that researchers report data.

Critical Thinking 3 Think and answer:

1. Which age of technology do you find the most interesting, and why?
2. Some people say that a CPU is like the brain of a computer. Explain why that description fits.
3. You have just completed your research, and you want to share the results with your friends. How would you share this information electronically? Explain your choice.

Essential Question 4 Think and complete:

Think about the information that you have learned in this theme. How does it help you to understand how to use technology effectively? Complete the sentence with your own ideas. After studying this theme, I know that I can use technology effectively because ....

Activity 5 Research, create, and show:

Create your own exhibition about a type of assistive technology that you find interesting. Find photographs or draw pictures of it. Then make labels and write captions for your photographs and illustrations. Include information about:

1. What type of technology it uses.
2. How it works.
3. How it helps people of determination.
4. Where you can find/buy/see it.

Theme 2

Digital Safety and Security Precautions

Lesson 1 Explorer in Action

Lesson 2 Online Dangers and How to Be Safe

Lesson 3 Using ICT Tools in a Healthy and Ethical Way

Lesson 4 How to Search Online

Lesson 5 How to Check Whether Information Online Is True

Lesson 6 Who Can Help You with Online Problems?

Lesson 7 My Personal Safety Plan

Lesson 8 Practicing What You Learned



Theme 2

Scope and Sequence

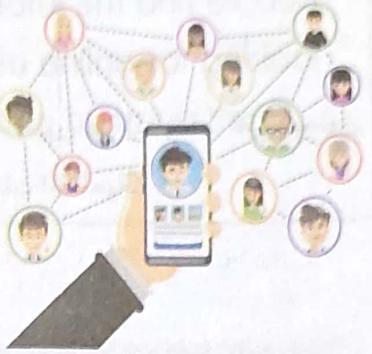
Digital Safety and Security Precautions

Essential Question: How can you be safe and use reliable sources when online?

Lesson	Topics	Skills Integration		
		Life Skills	Values	Issues and Challenges
LESSON 1 Explorer in Action	• How scientists use ICT in their jobs and daily life • How technology can help to communicate information	**Learning to know:** Critical thinking: Problem solving	**Academic values:** Appreciation of science and scientists	**Health and population issues:** Therapeutic health
LESSON 2 Online Dangers and How to Be Safe	• Online risks and dangers • The importance of keeping personal information private • Staying safe online	**Learning to be:** Communication **Learning to know:** Critical thinking	**Personal values:** Independence	**Citizenship issues:** Awareness of duties and rights
LESSON 3 Using ICT Tools in a Healthy and Ethical Way	• Posting online • Crediting others • Respecting the law • The positive effects of ICT tools	**Learning to live together:** Respect for diversity **Learning to be:** Accountability	**Co-existence values:** respect; tolerance and acceptance	**Citizenship issues: legal awareness** Non-discrimination issues: Discrimination against people with special needs
LESSON 4 How to Search Online	• Safe online searches • Choosing key words for an online search	**Learning to be:** Communication; self-management **Learning to know:** Critical thinking	**Personal values:** Independence	**Issues of globalization:** Technological awareness
LESSON 5 How to Check Whether Information Online Is True	• Reliable and unreliable online sources • The Egyptian Knowledge Bank	**Learning to know:** Critical thinking	**Academic values:** Curiosity; objectivity	**Issues of globalization:** Digital citizenship
LESSON 6 Who Can Help You With Online Problems?	• Online bullying and inappropriate content • What to do about online problems	**Learning to do:** decision-making **Learning to live together:** Empathy		**Citizenship issues:** Legal awareness **Issues of globalization:** Technological awareness
LESSON 7 My Personal Safety Plan	• Identifying and creating strong passwords • The importance of good anti-virus software • Protecting devices from possible online dangers	**Learning to know:** Creativity; critical thinking	**Academic values:** Objectivity	**Issues of globalization:** Technological awareness
LESSON 8 Practicing What You Learned	• Researching and presenting a topic safely and effectively	**Learning to do:** Collaboration	**Co-existence values:** Participation **Personal values:** Independence	**Issues of globalization:** Technological awareness

Lesson 1

Explorer in Action



- The internet can give us access to all kinds of information.

تمكننا شبكة الإنترنت من الوصول إلى كل أنواع المعلومات.

- The internet can be used as a powerful tool to communicate with others.

يمكن استخدام الإنترنت كأداة قوية للتواصل مع الآخرين.

The Internet



- It is a global network that connects millions of computers around the world.

هي شبكة عالمية تربط ملايين أجهزة الكمبيوتر حول العالم.

The Importance of the Internet

1. Finding answers for any questions quickly.
2. Collecting information for researchers.
3. Allowing people to communicate together.

العثور على إجابة لأي سؤال بسرعة - جمع المعلومات للباحثين - السماح للناس بالتواصل معًا.

Searching the internet



- We can type a question in the search engine to find an answer quickly.

يمكننا كتابة سؤال في محرك البحث للعثور على إجابة بسرعة.

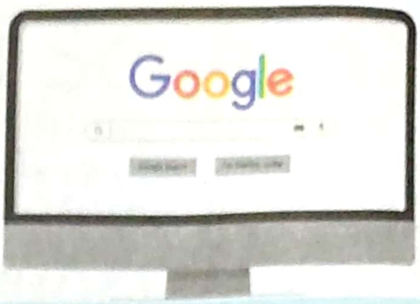
- It is important to check the information you get is correct and accurate.

من المهم التحقق من صحة ودقة المعلومات التي تحصل عليها.

Search Engine

- It is a software program that helps people find the information they are looking for online using **keywords**.

هو برنامج يساعد الأشخاص في العثور على المعلومات التي يبحثون عنها عبر الإنترنت باستخدام الكلمات المفتاحية.

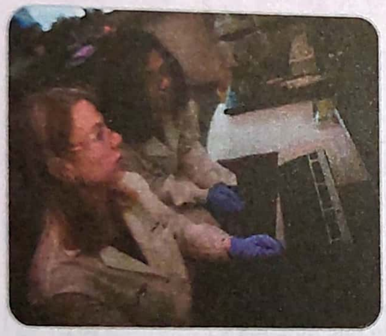


Google is the most popular search engine

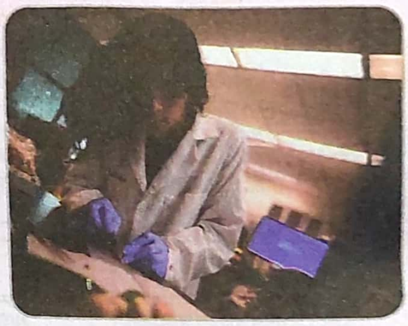
Anika Ullah

- The biologist Anika Ullah was at a wedding; and she tried a dessert made from an unusual nut that she had never heard of.
- She looked it up in an online encyclopaedia. She found many uses for the nuts, but she also discovered that eating too many of these nuts can cause cancer.

« تذوقت عالمة الأحياء "أنيقا أولاه" عندما حضرت زفافاً ذات مرة حلوى صنعت من نوع غريب من الجوز لم تسمع به من قبل، فقامت بالبحث عنه في الموسوعة الرقمية فوجدت له استخدامات متعددة إلا أنها اكتشفت أن تناوله بكثرة يسبب السرطان.







- She checked her online sources carefully, as she found scientific studies and reports written by experts.
- When she discovered these nuts could be dangerous, she decided to talk to local communities about the issue.
- She wanted people to use these nuts more safely, so she made films and online campaigns to help them to lead healthier lives.

« قامت بالتحقق من دقة المصادر على الإنترنت فوجدت دراسات علمية وتقارير رقمية كتبها الخبراء.

« عندما اكتشفت "أنيقا أولاه" أن لهذا النوع من الجوز مخاطر كبيرة قررت التحدث إلى المجتمعات المحلية حول تلك القضية.

« أرادت "أنيقا" أن يتعامل الناس بأمان مع هذا الأمر فأعدت مقاطع فيديو وحملات توعية على الإنترنت لمساعدتهم على حياة صحية أكثر.

Exercises

1 Choose the correct answer:

1. You can find the answer for any question quickly by using the ....
   a. search box near the Start button
   b. search engine online
   c. search engine offline

2. .... is the most famous search engine used all over the world.
   a. Facebook b. Windows c. Google

3. The scientific reports written by experts contain .... information.
   a. wrong b. accurate c. not real

4. One of the problems that you may face while using the internet is that ....
   a. you can't get all kinds of information
   b. some information is inaccurate
   c. all information expresses opinions

5. You must .... to get trusted information.
   a. check online resources
   b. check the connection
   c. use social media sites

6. Anika Ullah is a (an) ....
   a. archaeologist b. biologist c. anthropologist

7. Anika Ullah found that eating too many of these nuts cause ....
   a. diabetes b. diarrhea c. cancer

2 Write the scientific term:

1. It is a global network that connects millions of computers around the world. (............)
2. It is a software that helps people find the information they are looking for online. (............)

3. The most popular search engine used by people all over the world. (..........)

3 Put (✓) or (✗):

1. The internet is a global network that connects millions of computers offline. (   )
2. All the information that you get from the internet is accurate. (   )
3. The internet can be used to communicate with friends or family. (   )
4. Google website is the most famous operating system all over the world. (   )
5. Anika Ullah discovered that these nuts could be dangerous. (   )
6. Anika Ullah made films and online campaigns to help them to lead healthier lives. (   )

4 Complete the following sentences:

1. The internet can give us access to all kinds of ....; it can also be used to .... with the others.
2. We can type a question in the .... to find answers quickly.
3. .... is a software program that helps people find the .... they are looking for online using ....
4. The .... Anika Ullah was at a wedding; and she tried a .... made from an unusual nut that she had never heard of.
5. Anika Ullah wanted people to use these nuts more safely so she made .... and online .... to help them to lead healthier lives.
6. While searching for any information, think about the .... you will use.

5 Rearrange the sentences below:

(   ) Tell the reader where the information came from.
(   ) Think about the search terms or keywords you will use.
(   ) Look carefully at the information that you have found.
(   ) Cross check facts by trying to find them in more than one place.
(   ) Decide what information you want to find out.

School Book Questions

Answered in the Guide Answers

Life Skills 1 Read and answer:

What are some possible problems with finding out information online?

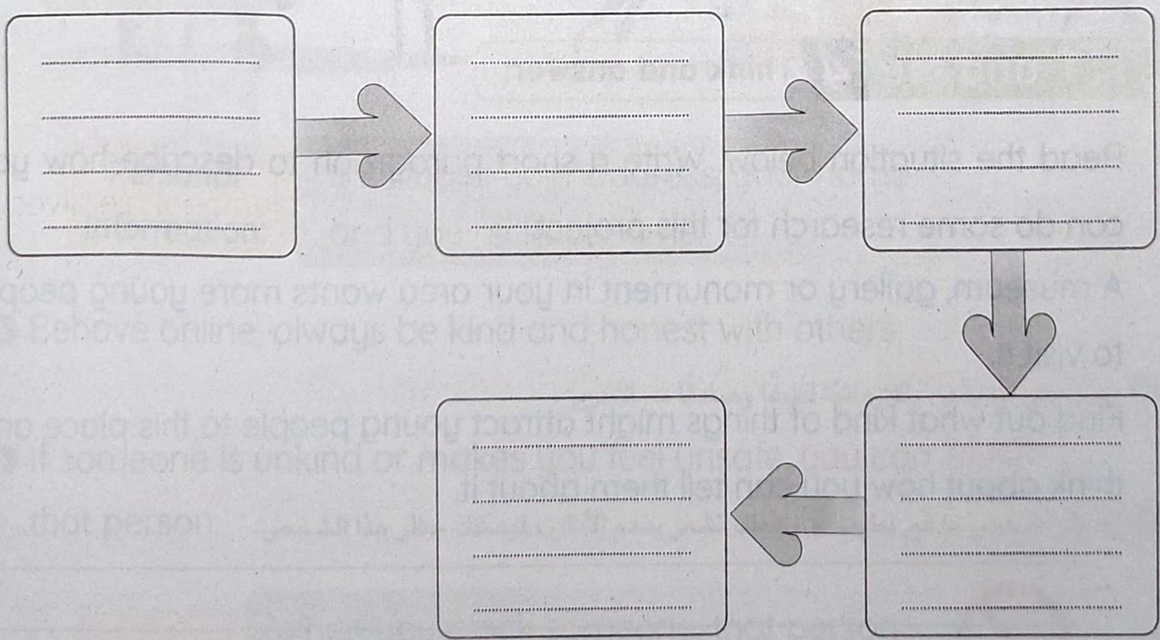
____

____

Graphic Organizer 2 Read and complete:

Complete this flow chart to show the sequence of activities when you research something online. Write the sentences in the box in the correct places in the flow chart.

- Cross check facts by trying to find them in more than one place.
- Decide what information you want to find out.
- Look carefully at the information that you have found.
- Tell the reader where the information came from.
- Think about the search terms or keywords you will use.



Critical Thinking 3 Think and answer:

You can find out information by talking to people directly, or by finding information online. When you do research, you need to make sure that the information is accurate. Work in pairs to discuss the following questions.

1. How could you find out information about each of the following topics?
   a. Popular free time activities (sports, entertainment, etc.) for young people in different parts of Egypt.

   ....

   b. What games children play in other countries.

   ....

   c. How national days are celebrated across the world.

   ....

   d. How to improve access to clean water in Egypt.

   ....

2. Why might it be easier to find information about some areas of research than others?

....

....

ICT and Me 4 Think and answer:

Read the situation below. Write a short paragraph to describe how you can do some research for this project.

A museum, gallery or monument in your area wants more young people to visit it.

Find out what kind of things might attract young people to this place and think about how you can tell them about it.

....

....

Online Communication

- People use computers, phones or tablets to communicate together through **instant messaging**, **emails** and **direct messages**.

  يستخدم الأشخاص أجهزة الكمبيوتر أو الهواتف أو الأجهزة اللوحية للتواصل معًا من خلال المراسلة الفورية ورسائل البريد الإلكتروني والرسائل المباشرة.

- Be careful, some people communicate online to be unkind or to steal your personal information.

  كن حذرًا من أن بعض الأشخاص يتواصلون عبر الإنترنت لأغراض سيئة أو لكي يسرقون معلوماتك الشخصية.





Personal Information: It includes your address, your name and your school name.

- Behave online, always be kind and honest with others.

  تهذب على الإنترنت ، وكن دائمًا لطيفًا وصادقًا مع الآخرين.

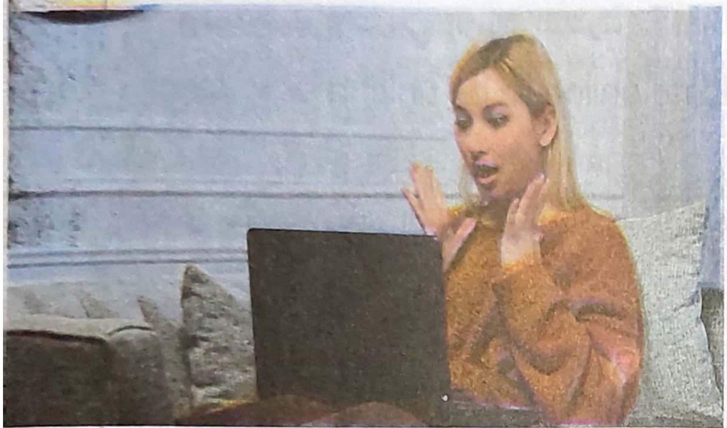
- If someone is unkind or makes you feel unsafe, you can **block** that person.

  إذا كان شخص ما غير لطيف أو يجعلك تشعر بعدم الأمان ، فيمكنك حظر هذا الشخص.

Block: When you block someone, that person can't see your posts or contact you.

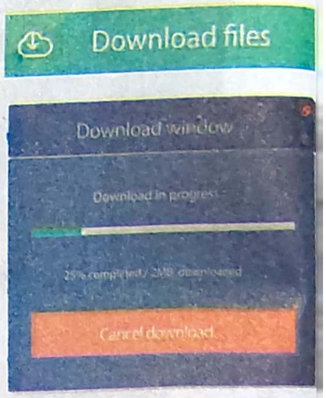
Unsafe Websites

- Be careful when clicking on links, and don't click on links that you are unsure of. كن حذرًا عند النقر على أي رابط إلكتروني ولا تنقر على روابط لست متأكدًا منها.
- If you view an unsafe scene or inappropriate site, don't panic. Leave the site and tell your teacher or a family member who can help you.
  إذا عرضت عن طريق الخطأ مشهدًا غير آمن أو موقعًا إلكترونيًا غير مناسب، فلا داعي للذعر اترك الموقع وأخبر معلمك أو أحد أفراد أسرتك الذي يمكنه مساعدتك.





Downloading Files



- Think carefully before you download files because some files have viruses.
- Viruses can damage your computer or be used to track your information.
  فكر جيدًا قبل تنزيل الملفات لأن بعض الملفات بها فيروسات - يمكن للفيروسات إتلاف جهاز الكمبيوتر الخاص بك أو استخدامها لتتبع معلوماتك.
- Check the website before you download a file. Is it a trusted site? If you are not sure, you shouldn't download files from it.
  تحقق من موقع الويب قبل تنزيل الملف - هل هو موقع موثوق به؟ إذا لم تكن متأكدًا، فلا يجب عليك تنزيل الملفات منه.
- When you are using the internet, you might want to download a file, so you can look at it later, without being connected to the internet!
  عند استخدام الإنترنت، قد ترغب في تنزيل ملف - لكي يمكنك الاطلاع عليه لاحقًا دون أن تكون متصلاً بالإنترنت.

Sharing Data Online

» Don't share **personal data** online without asking your teacher or a family member.

« لا تشارك بياناتك الشخصية على شبكة الإنترنت دون استشارة معلمك أو أحد أفراد أسرتك والحصول على موافقته.

» If you share your personal data online, you may receive **spam messages**.

« إذا شاركت بياناتك الشخصية على شبكة الإنترنت فقد تصلك رسائل مزعجة.





Spam Messages رسائل مزعجة

» Spam mail includes unwanted messages to advertise products or gather more information from you. The messages may also include viruses.

» If an email includes an **unfamiliar address**, **unkown links**, or messages in **ALL CAPITAL LETTERS**, it migh be spam.



» Check your privacy settings on social media sites.

» Make sure that only your friends and family can view your information.

« تحقق من إعدادات الخصوصية الخاصة بك على مواقع التواصل الاجتماعي.
واحرص على أن تكون إمكانية الإطلاع على المعلومات الخاصة بك متاحة لأفراد أسرتك و أصدقائك فقط.

» Always think before you post something, especially a photo or video. Ask yourself, *Am I sure this photo is appropriate? Could this embarrass or hurt me or others*? Always think before you post about yourself or other people.

« فكر دائمًا قبل نشر أي شيء، خاصة الصور ومقاطع الفيديو. اسأل نفسك.. هل تلك الصورة لائقة، وهل يجوز نشرها؟ .. أو هل تسبب إحراجًا للآخرين. دائمًا فكر قبل نشر أي شيء عنك أو عن الآخرين.



Exercises

1 Choose the correct answer:

1. Online communication requires all the following devices, except ......
   a. computers b. TV c. tablets
2. People may use .... to communicate together.
   a. spam messages b. instant messages c. personal information
3. If someone makes you feel unsafe, you can .... that person.
   a. advise b. avoid c. block
4. Your .... includes your name, address and your date of birth.
   a. spam message b. personal information c. instant message
5. If an email includes ...., this message might be spam or include viruse
   a. familiar address b. capital letters c. known links
6. Messages calling for unreal advertisements in your email are ....
   a. spam messages b. personal information c. downloaded files
7. If a friend sends you a strange picture that scares you, what shou you do?
   a. Copy the picture to your computer.
   b. Tell your parents about this picture.
   c. Send the picture to all your friends.
8. If you accidentally view an inappropriate site, what should you do?
   a. Stop using technology. b. Keep the site opened
   c. Leave the site and tell your parents.
9. If you get a message from a stranger on your social media accou that includes a video to watch, what should you do?
   a. Download the video to watch later.
   b. Delete and ignore the message.
   c. Send him a friend request.
10. Your friend sent you a message on a social networking site, yo must ....
    a. close the device b. delete the message c. check his identity

2 Put (✓) or (✗):

1. When someone is blocked, they can see your posts. ( )
2. It's no harm to get your friend's information without his permission. ( )
3. Clicking on an unknown link may download viruses to your device. ( )
4. Blocking is considered one of the ways to communicate with your colleagues or friends on the internet. ( )
5. If you receive an unknown message in all capital letters, it might be a spam. ( )
6. You must keep your personal data private to avoid viruses or spam messages. ( )
7. You can download files on your device without internet service. ( )
8. You can look at any file you have downloaded before without the need for the internet. ( )

3 Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1 Spam messages	a. allow you to communicate online.
2 Personal information	b. prevents this person from seeing your posts.
3 Instant messages	c. may include unwanted advertisement.
4 Blocking someone	d. may include your address or your name.

1 .... 2 .... 3 .... 4 ....

4 Complete the following sentences using the word in brackets:

(block - download - instant messages - personal information - spam)

1. An email from an unknown address that includes advertisements is likely to be ....
2. When you .... a file, you save it to your device.
3. If you .... someone, they will no longer be able to contact you or view your account.
4. Think carefully before you share your address or other .... online.
5. You can use .... to communicate with friends.

School Book Questions

Answered in the Guide Answers

Comprehension 1 Read and Complete:

Complete the sentences. Use the following words.

(block – download – instant messaging – personal information – spam)

1. An email from an unknown address that includes advertisements is likely to be ....
2. When you .... a file, you save it to your device.
3. If you .... someone, they will no longer be able to contact you or view your account.
4. Think carefully before you share your address or other .... online.
5. You can use .... to communicate with friends.

Life Skills 2 Think and answer:

You are setting up a new social media account. Who would you accept as a friend? Check. Then discuss your choices with a partner.



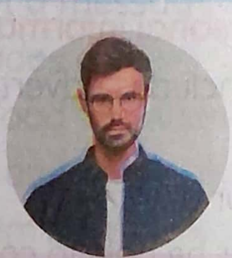
Name: Rami
From: Unknown
Age: 23 ☐



Name: Younis
From: School
Age: 9 ☐



Name: Malak
From: My sister
Age: 12 ☐



Name: Unknown
From: Unknown
Age: Unknown ☐



Name: Amir
From: Younis's dad
Age: 32 ☐

You're now going to create your 'online profile' for your social media account. Which information would you feel secure sharing with people on social media? Check the information you would feel comfortable sharing.

• Telephone number	☐	• Birthday	☐
• Name	☐	• Interests	☐
• Address	☐	• Favourite place	☐
• School	☐	• School	☐

Can you think of other personal information you would share with people on social media? Write it below.

....

ICT and Me 3 Think and choose:

Read the scenarios and check the boxes. There may be more than one correct answer.

1. You get a message from a stranger on your social media account. The message tells you to download a file to watch a funny video. What should you do?
   a. Download the video to watch later.
   b. Ask a parent for help and don't open the file.
   c. Delete and ignore the message.
   d. Write a reply and say you can't wait to watch it.
2. A friend sends you a strange picture that scares you. What should you do?
   a. Send the picture to all your friends.
   b. Tell a parent.
   c. Copy the picture to your computer.
   d. Send a message back with an even scarier picture.

Can you think of another online situation where you have different options about how to respond? What would you do?

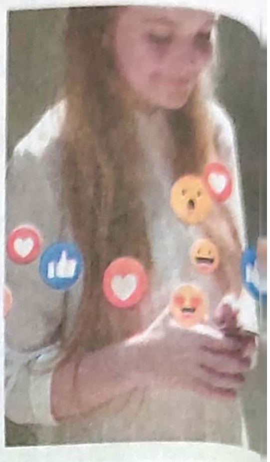
....

....

Lesson 3

Using ICT Tools in a Healthy & Ethical Way

Posting Online نشر المعلومات على شبكة الإنترنت



- When you tag someone, you identify that person in a post, photo, or video.
- The tag provides a link to the person's profile.
- Anyone who has access to your account can see it.

- عندما تقوم بالإشارة إلى شخص ما فهذا يعني تحديد هوية الشخص في منشور أو صورة أو مقطع فيديو.
- تتضمن الإشارة لأي شخص رابط الوصول للملف الشخصي لهذا الشخص.
- ويمكن لأي شخص لديه إمكانية الدخول لصفحتك رؤية ذلك.

When you post on social media and tag your friends,

1. Make sure to ask for their permission first. It shows that you respect their privacy.
2. Before you post something, ask yourself, *Is this post kind to others?* If you are unsure, don't post it.

عندما تريد نشر معلومات عن أصدقائك على مواقع التواصل الاجتماعي وتقوم بالإشارة إليهم:

١. تأكد من طلب الإذن منهم أولاً لإن ذلك يظهر أنك تحترم خصوصيتهم.

٢. قبل أن تنشر شيئًا ، اسأل نفسك ، هل هذا المنشور مناسب للآخرين؟ إذا كنت غير متأكد ، فلا تنشره.

Crediting Others ذكر مصادر المعلومات و أصحابها

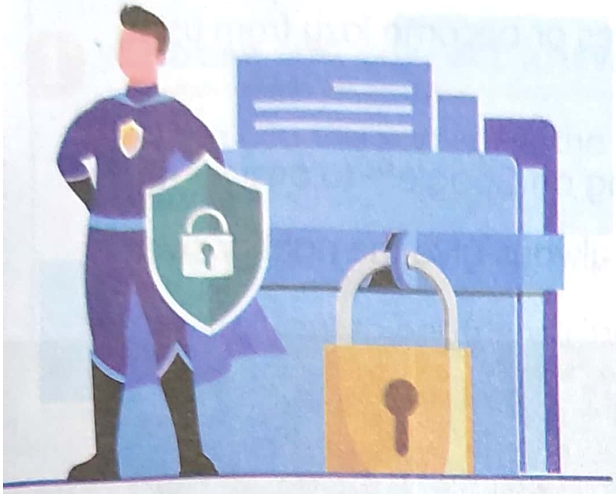
When you are looking for information to post online, or to include in a PowerPoint® presentation,

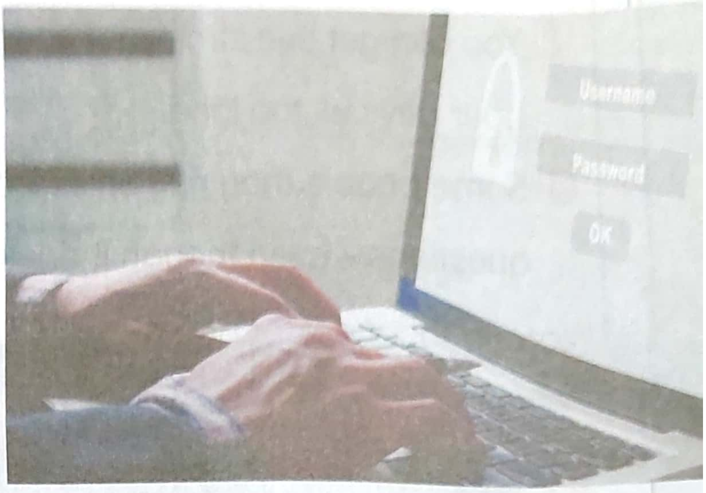
it's important to **credit** a **source of information** and let others know where the information you are sharing came from.

إذا كنت تبحث عن المعلومات لنشرها على شبكة الإنترنت أو لإدراجها في عرض تقديمي تقوم بإعداده بواسطة باوربوينت فمن المهم أن توثق مصدر المعلومات التي شاركتها و تذكر أصحابها.

Respecting the Law

» Respect the law when you are posting online or searching for topics.





1 Don't go on banned sites.

Banned Sites
المواقع الإلكترونية المحظورة

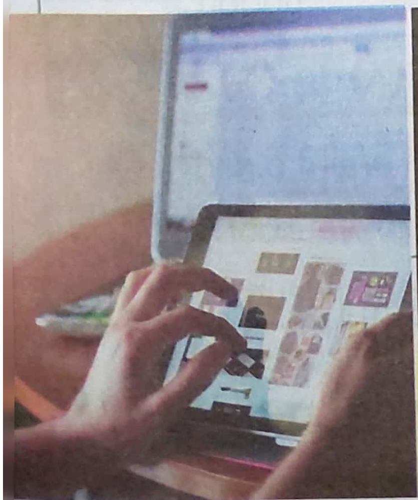
They may publish inaccurate, immoral, and harmful material.

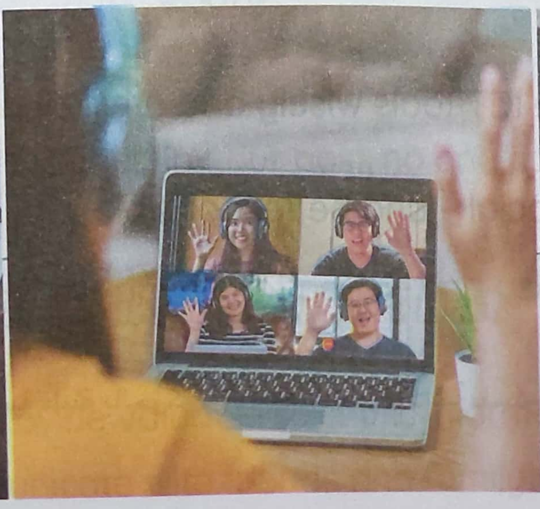
ربما تنشر مواد غير دقيقة، غير أخلاقية أو مضرة.

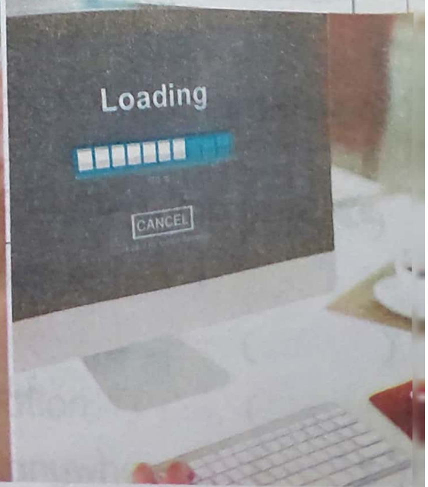
2 Ask your teacher or a family member before you go on a new site.

The positive effects of ICT tools

1. You can read the news with just a click of the mouse.
2. You can communicate with your friends and family anywhere.
3. You can upload and download videos and photos and view them whenever you want.

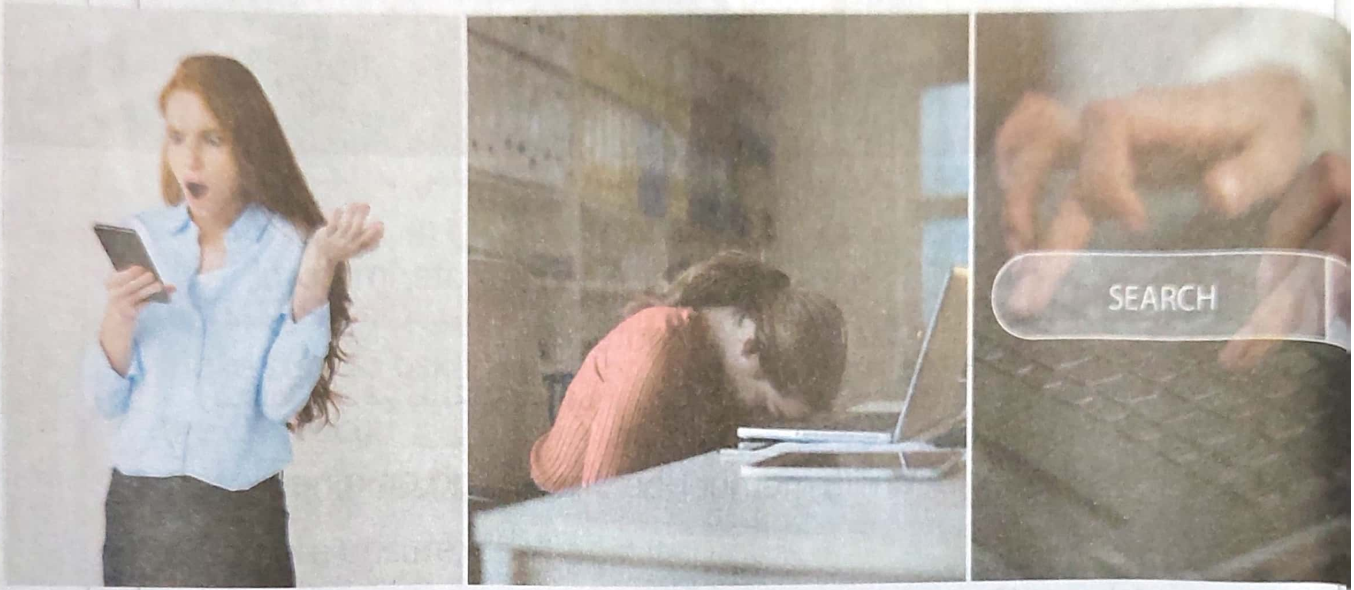






The negative effects of ICT tools

1. You may come across something online that upsets you.
2. You can get eye strain, or headaches or become lazy from using your devices too long.
3. Some people may rely on searching on Google™ to answer all their questions - even though it doesn't always give the right answer!



1. ربما تشاهد على شبكة الإنترنت شيئاً يزعجك.
2. ربما تشعر بإجهاد في عينك أو صداع في رأسك أو تصبح كسولاً عند الافراط في إستخدام الأجهزة الإلكترونية.
3. قد يعتمد بعض الناس على موقع جوجل للبحث عن الإجابات عن أسئلتهم كلها على الرغم أن الموقع لا يعطي دائمًا إجابات صحيحة.

- Remember to use ICT tools wisely and ethically.
- Stay active and social - and be responsible.

- تذكر أن عليك إستخدام أدوات تكنولوجيا المعلومات بحكمة و بطريقة أخلاقية.
- لا تنس أن تمارس حياه إجتماعية مليئة بالحركة و النشاط و تصرف دائماً بمسئولية.

Exercises

1 Choose the correct answer:

1. When you tag someone, the tag provides a .... to the person's profile.
   a. request   b. link   c. message
2. Samira went to her friend's birthday party and took a lot of photos What should she do?
   a. Share all photos on Facebook.
   b. Tag all her friends in a post.
   c. Get permission from her friends to share.
3. .... is a software which you can use to create presentations.
   a. MS Word   b. PowerPoint   c. Windows
4. One of the ethical behaviors in using ICT tools is to .... a source.
   a. credit   b. ignore   c. edit
5. .... sites may publish inaccurate and harmful material.
   a. Scientific   b. Trusted   c. Banned
6. One of the ethical behaviors in using ICT tools is you can get ....
   a. headache   b. updated news   c. wrong answers
7. Spending a lot of time using technology makes you feel ....
   a. happy   b. lazy   c. active

2 Put (✓) or (✗):

1. When a friend is tagged in your post, no one can see his account. (   )
2. You must respect the privacy of people and ask them before posting. (   )
3. Banned sites provide valuable scientific information. (   )
4. You can communicate with friends and family anywhere. (   )

5. Without the internet, you cannot see a video after downloading it. ( )
6. All answers for any questions on Google™ are right and accurate. ( )
7. You can get eye strain or headaches from using your devices for too long. ( )
8. Before you post something, ask yourself: Is this post kind to others? ( )

3 Classify these situations into positive or negative effects of ICT tools:

situations	Positive	Negative
1 Adam tags his friend in an old image without his permission.		
2 Lara asks her friend to tag her in a picture before she posts it online.		
3 Sarah shares a valuable information without crediting the source.		
4 Ahmed works on his computer all day without any rest.		
5 Maged presents information via PowerPoint with its sources.		
6 Lina asks her teacher first before she goes on a new website.		

School Book Questions

Answered in the Guide Answers

Values 1 Think and answer:

Read the situations. Answer the questions.

1. Nadia went to her friend's birthday party over the weekend. She took a lot of photos, including funny photos of her friends. Later that day, Nadia posted the photos on social media, and she tagged her friends. One of her friends was upset that she was tagged in a photo. What are some reasons Nadia's friend might be upset?
   What should Nadia do next?
2. Maged created a PowerPoint® presentation about air pollution in big cities. He worked quite hard, and did a lot of research. In his report, he included the following:
   - statistics about pollution in big cities
   - his opinions about the effects of air pollution
   - what he learned about the effects of air pollution
   - an environmental scientist's views on how to reduce air pollution
   - his experience visiting a local factory

   Check the information above that needs to be credited.
   Then, write why the information needs to be credited

Graphic Organizer 2 Think and write:

What are some of the pros and cons of ICT tools in everyday life? Consider:

- Access to information
- People of determination
- Health and exercise
- Privacy

Pros of Using ICT Tools	Cons of Using ICT Tools
....	....

ICT and Me 3 Write a summary:

Make a promise to yourself to use ICT tools in a healthy and ethical wa
Write 1-2 paragraphs to explain how you will fulfill this promise. Consider

- Posting online
- Respecting the law
- Health

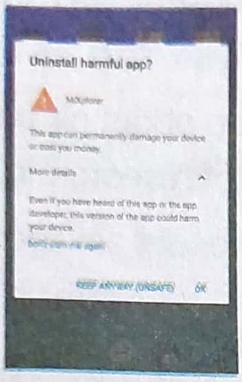
Lesson 4

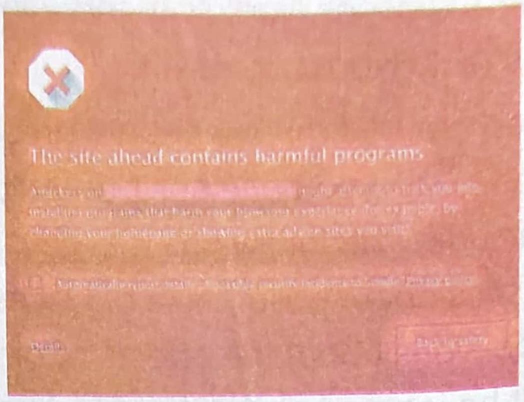
How to Search Online

Searching Safely البحث بطريقة آمنة

» Choose browsers that warn users before they enter an unsafe site or download a harmful app.

« اختر المتصفحات التي ترسل تنبيهات للمستخدمين عند محاولة الدخول لموقع إلكتروني غير آمن أو تنزيل برنامج ضار.





If you get a warning message,

1. Make sure to show your teacher or a family member.
2. Do not proceed to the site or with the download.

إذا تلقيت رسالة تحذير:

1. فاعرضها على أحد أفراد أسرتك أو معلمك.
2. لا تتابع عملية الدخول إلى الموقع أو عملية التنزيل.

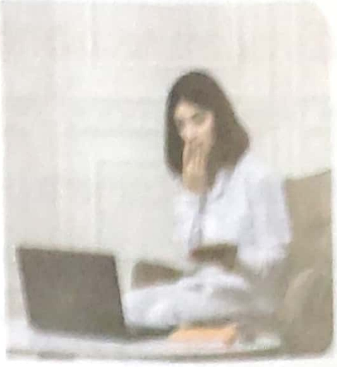
Some popular browsers have search engines set up just for children.

- They will only show results that are age-appropriate.
- They also include a parental control app.
- They also include helpful safety tips for children.



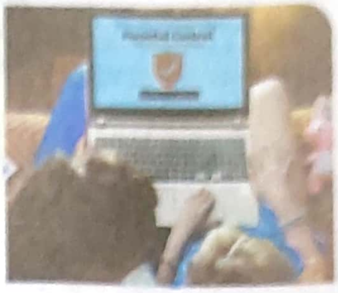
تتميز بعض المتصفحات الشائعة بمحركات بحث مخصصة للأطفال:

- تعرض الفئة المناسبة لعمرهم.
- ربما تتضمن بعض المتصفحات تطبيقًا يتيح للوالدين مراقبة أطفالهم.
- ربما تتضمن بعض المتصفحات نصائح مفيدة مرتبطة بأمان الأطفال.



» Watching videos online is fun, but it's dangerous if the sites you watch videos on are not safe, or if the video shows content that is not appropriate for your age.

مشاهدة الفيديوهات على شبكة الإنترنت أمر ممتع، ولكنه قد يشكل خطورة إذا كانت المواقع التي تشاهد عليها الفيديوهات غير آمنة أو أن الفيديو يعرض محتويات غير مناسبة لعمرك.



» Choose child-friendly websites that include filters that help you avoid clicking on inappropriate videos.

اختر مواقع الويب الملائمة للأطفال والتي تتضمن فلترًا يساعدك على تجنب مشاهدة مقاطع فيديو غير مناسبة.

Searching Smartly البحث بطريقة ذكية



Type longer phrases, not just a couple of words.

This will help you get better results.

عند البحث اكتب جملًا طويلة بدلًا من الاكتفاء بكلمتين أو ثلاث يمكن لذلك مساعدتك للحصول على نتائج أفضل.



If your keywords are too general, you will get too many results. Many of them will not be relevant to your search.

إذا كانت الكلمات المفتاحية التي تستخدمها عامة وشائعة جدًا ستحصل على عدد كبير من النتائج وسيكون الكثير منها غير مرتبط بموضوع بحثك.

Example:

There is an animal called a jaguar.
There is also a car brand called Jaguar.
If you type in 'jaguar' you may get advertisements for a car!
To avoid this, type 'jaguar animal'.
If you were interested in where jaguars live you could type 'jaguar - animal - habitat'.



If you are searching for information on an image.

- Use the image instead of words in your search.
- Use the camera button, and add your image.
- Your teacher can help you.



إذا كنت تبحث عن معلومات عن صور:

- استخدم الصورة بدلاً من الكلمات في بحثك.
- استخدم زر الكاميرا وأضف صورتك.
- يمكن لمدرسك مساعدتك.

Important steps to help you in searching for information

- Many search engines ignore some words like (the, and, how, where, or):
- Add a + sign before the word:

  if you need these words to be included in your search.
- Add a - sign before the word:

  if you you would like the search engine to avoid this word.
- Put the phrase inside quotation marks "jaguar animal habitat":

  if you are searching for a particular phrase

- تتجاهل العديد من محركات البحث بعض الكلمات مثل (و ، كيف ، أين ، أو)
- أضف علامة + قبل الكلمة

  إذا كنت بحاجة إلى تضمين هذه الكلمات في بحثك.
- أضف علامة - قبل الكلمة

  إذا كنت ترغب في أن يتجنب محرك البحث هذه الكلمة.
- ضع العبارة داخل علامتي تنصيص "موطن حيوان جاكوار"

  إذا كنت تبحث عن عبارة معينة.

Exercises

1 Choose the correct answer:

1. What will you do if you receive a warning message while searching online?
   a. I will proceed to the site.
   b. I will tell my teacher.
   c. I will stop using the internet.
2. Downloading .... applications from the internent is a problem that may face you during searching the internet.
   a. useful b. safe c. harmful
3. Child-friendly websites may include .... to avoid seeing inappropriate videos.
   a. antivirus b. personal data c. filters
4. .... help you get relevant results for your research.
   a. Short phrases b. Long phrases c. General words
5. If you are interested to know where jaguars live, type .... in the search engine.
   a. jaguar - habitat b. jaguar + habitat + car
   c. jaguar + animal + habitat
6. How would Amira search for information on how penguins stand on the ice all day?
   a. Penguins – ice – stand - day
   b. How do penguins stand on the ice all day?
   c. "How do penguins stand on the ice all day?"
7. The + sign before a word means you want the search engine to .... this word during searching.
   a. avoid b. include c. ignore
8. To search for summer fruits avoiding the peach, you must type .... in the search engine.
   a. summer fruit + peaches
   b. summer fruit except peaches
   c. summer fruit - peaches

2 Put (✓) or (✗):

1. You can proceed to the site if you receive a warning message from the browser. ( )
2. Child-friendly websites include filters to avoid inappropriate videos. ( )
3. If your keywords are too general, you will get accurate information. ( )
4. You can use the image instead of words in your search engine. ( )
5. Writing one word only is enough to get the best results while searching. ( )
6. If you need these words to be included in your search you must add the - sign before this word. ( )

3 Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1 Results	a. if you would like the search engine to avoid this word.
2 Browser	b. an application that helps to access information online.
3 Search engine	c. if you are searching for a particular phrase.
4 Add the + sign before word	d. if you need these words to be included in your search.
5 Add the- sign before word	e. is an application used to search on the internet.
6 Put the statement inside " "	f. a list of results that are displayed based on a specific search

1 .... 2 .... 3 ....

4 .... 5 .... 6 ....

School Book Questions

Answered in the Guide Answers

Comprehension 1 Look and match:

Match the words with their meanings.

1. browser
2. search engine
3. results

a. a software application that carries out web searches. ☐

b. a software application that is used for accessing information on the internet. ☐

c. a list that is compiled based on a search. ☐

2 Look and write:

When might you type the following characters when searching a topic online?

1. + sign : ....
2. - sign : ....
3. Quotation marks : ....

Critical thinking 3 Think and write:

Think about what you learned about searching smartly. Read each topic and decide what you would type to search for it. Remember, you can include special characters that can help to narrow your search.



Topic 1:
You are searching for information about football leagues in your area. Think about what you want to avoid in your search, and ways that it could be narrowed to focus specifically on what you need.



Topic 2:
You would like to do a search on different breeds of cats. You want to avoid getting the following results:

- the play or the film
- cat products for sale
- cat jokes



Topic 3:
You are researching different types of plants. You want to focus your search on plants that can survive with no direct sunlight.

ICT and Me 4 Think and answer

1. What topics are you most interested in searching for online? Why?
2. When might you decide to search with a picture instead of typing text?

» There are countless online sources that provide valuable information. However, not all online sources are reliable.

Unreliable Online Sources

مصادر إلكترونية غير موثوقة

» Social media apps, wiki sources and blogs are not very reliable. They could include some credible information, but they could also include opinions, errors, or even lies.

« تطبيقات التواصل الاجتماعي والمصادر مفتوحة المصدر "ويكي" والمدونات ليست موثوقة للغاية لأن المعلومات يمكن أن تتضمن بعض المعلومات الموثوقة ، ولكنها قد تتضمن أيضًا آراء أو أخطاء أو حتى أكاذيب.

Confirming Reliable Sources

التأكد من المصادر الموثوقة

When reviewing online sources

1 Check the date of the publication is current.

2 Check the authors - who are they? Are they experts in their field?

3 Ask your teacher or a family member to help you check.





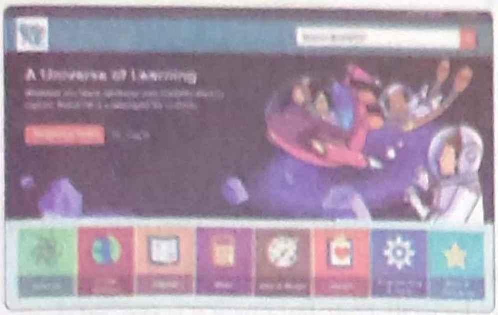
1 تحقق من تاريخ النشر الحالي.

2 تحقق من المؤلفين - من هم؟ هل هم خبراء في مجالهم؟

3 اطلب من معلمك أو أحد أفراد أسرتك مساعدتك في التحقق.

How to know if the source is reliable:

1. It will be well-written, with almost no mistakes.
2. The design of the page will look professional.





1. ستكون مكتوبة بشكل جيد ، مع عدم وجود أخطاء تقريبًا.
2. سيبدو تصميم الصفحة إحترافيًا.

Websites ending with	They are run by	موقع تابع لـــ
.com	businesses commercial sites	المواقع تجارية (الشركات)
.gov	government agencies	المواقع الحكومية
.org	non-profit organizations	منظمات معروفة غير هادفة للربح
.edu	colleges and universities	مواقع تعليمية (المدارس و الجامعات)

The Egyptian Knowledge Bank (EKB)

موقع بنك المعرفة المصري

Egyptian Knowledge Bank
بنك المعرفة المصري

- The Egyptian government is doing its best to protect its citizens from unreliable online sources.
- The Egyptian Knowledge Bank offered free access to their library to Egyptian citizens.
- The library contains materials on various subjects. All information has been verified as accurate. You can feel confident that the information provided by the EKB is reliable.

- تبذل الحكومة المصرية جهودًا هائلة لحماية مواطنيها من المصادر الإلكترونية غير الموثوقة.
- منح بنك المعرفة المصري المواطنين المصريين إمكانية الدخول إلى مكتبته مجانًا.
- تحتوي هذه المكتبة على مواد في موضوعات مختلفة وقد تم التحقق من دقة تلك المعلومات ومصداقيتها.

Exercises

1 Choose the correct answer:

1. .... sources are written and verified by experts.
   a. Unreliable b. Reliable c. Questionable
2. The .... is the online library that includes accurate information.
   a. EKB b. Wiki c. Blog
3. Social media sites are considered .... sources for getting information.
   a. trusted b. reliable c. unreliable
4. Relaible sources are characterized by all the following, except ....
   a. being free of mistakes b. being written by experts
   c. including opinions
5. Business commercial sites always end with ....
   a. .net b. .com c. .org
6. To apply to a university, you must use the website domain ....
   a. .net b. .org c. .edu

2 Put (✓) or (✗):

1. Social media sites may include errors or mistakes. (   )
2. The Egyptian Knowledge Bank website is an untrusted source. (   )
3. The information that is written by experts always includes errors. (   )
4. You must check that the date of publication of online sources is current. (   )
5. Unreliable sites look professional and the information in them is well written. (   )

3 Choose from column (A) what suits it in column (B):

Column (A) Website domain	Column (B) They are run by
1 .com	a. non-profit organizations
2 .gov	b. government agencies
3 .org	c. colleges and universities
4 .edu	d. businesses commercial sites

1 .... 2 .... 3 .... 4 ....

4 Classify the following words:

(Facebook - EKB - Blogs - Wikis)

Reliable Sources	Unreliable Sources
....	....

School Book Questions

Answered in the Guide Answers

Comprehension 1 Read and answer the questions:

1 Match the website domains to the types of groups that run them.

Column (A) Website domain	Column (B) They are run by
1 .gov.eg	a. Egyptian organizations
2 .org.eg	b. commercial sites
3 .edu.eg	c. governmental sites
4 .com	d. educational sites

2 What do each of the groups above use their website to do or to promote?

a. Egyptian organizations: ....

b. Commercial sites: ....

c. Government sites: ....

d. Educational sites: ....

3 Why can the above website domains be reliable sources of information?

....

....

....

4 Why are blogs and social media sites usually not reliable sources of information?

....

....

....

Graphic Organizer 2 Think and write

1 What websites have you visited or heard about? Write a list.

....

....

....

2 When researching information, it is important to understand which types of sources are reliable, and which are not. Look at your list of websites. In the chart below, write which ones are reliable sources of information, and which ones are not. Your teacher can help you.

Reliable Sources	Unreliable Sources
....	....
....	....

Critical Thinking 3 Think and answer

Explain why the sources you listed in the chart above are reliable or unreliable.

Reliable: ....

....

....

Unreliable: ....

....

ICT and Me 4 Write a summary

In Lesson 8, you will present research on a topic. How will you use what you learned in this lesson to prepare you to do research? How will you choose sources to use for your presentation? How will you determine which sources are reliable, and which ones are not?

....

....

....

....

....

Lesson 6

Who Can Help You with Online Problems?

- Online problems are common. They can be scary or make you feel helpless.
- However, you can always ask for help, no matter how embarrassed or scared you feel.

- المشكلات التي نواجهها على الإنترنت شائعة، ربما تسبب لك الخوف أو تشعرك بالعجز.
- مهما تكن درجة إحراجك أو خوفك عليك طلب المساعدة من الآخرين.

Online bullying and how to avoid it
التنمر عبر شبكة الإنترنت و كيفيه تلاشيه

Bullying التنمر : It is a repeated unkind behavior towards someone.

هو تصرف أحد الأشخاص بطريقة سيئة بشكل متكرر تجاه شخص آخر.





- Online bullying can include mean posts, messages or texts.
- Our devices are always with us, so it can be hard to escape this kind of bullying. This may make you feel trapped.

- يمكن للتنمر الإلكتروني أن يتضمن منشورات بذيئة أو رسائل سيئة أو نصوصًا مؤذية.
- من الصعب الهروب من هذا النوع من التنمر الذي قد يشعرك أنك محاصر لأن أجهزتنا دائمًا معنا.

How to avoid online bullying

1 Make sure not to contact anyone you don't know.

2 Ask your teacher or a family member for help in any situation.



1 احرص دائمًا على عدم التواصل مع أشخاص مجهولين بالنسبة لك.

2 أخبر معلمك أو أحد أفراد العائلة بأي موقف تتعرض له لمساعدتك.

Online identity theft سرقة الهوية عبر الإنترنت

If Your identity gets stolen online:

- They may use your personal information.
- They may have access to your social media accounts.
- They could see your address, email or phone number.



إذا قام أحد الأشخاص بسرقة هويتك عبر الإنترنت:

يصبح بإمكان السارق استعمال معلوماتك الشخصية.

يمكنه أيضًا استعمال حساباتك على مواقع التواصل الاجتماعي.

يمكنه أيضًا الوصول لعنوانك أو بريدك الإلكتروني أو رقم تليفونك.

How can you face online problems?

1. Make sure to talk to your teacher or a family member about it.
2. Your teacher or a family member may feel that people in authority should get involved. This can include the police or **The General Department for Combating Internet Crimes in Egypt.**



1 أخبر معلمك أو أحد أفراد العائلة بأي موقف تتعرض له لمساعدتك.

2 ربما يجد الأشخاص الموثوق فيهم أنه من الضروري تدخل السلطات المختصة لتتبع تلك المشكلة مثل: الشرطة أو (إدارة مكافحة جرائم الإنترنت)

Exercises

1 Choose the correct answer:

1. .... is a repeated unkind behavior towards someone.
   a. Hacking   b. Headache   c. Bullying
2. If you see a post from an unknown person bullying you, what do you do?
   a. I will share this post.   b. I will block them.   c. I will bully them.
3. If you found your profile picture on another account on Facebook, this is called ....
   a. online bullying   b. identity theft   c. unreliable source
4. What are the actions that could expose you to identity theft?
   a. Blocking unkind people
   b. Using strong password
   c. Communicating with strangers
5. If you accidently saw a scary image on a website, what would you do?
   a. Forward this image to your friend.
   b. Ask a family member to help you.
   c. Never go online again.
6. Online bullying makes you ....
   a. lose confidence   b. happy and stronger   c. an unkind person

2 Put (✓) or (✗):

1. bullying is behaving in an unpleasant manner towards other people. (   )
2. Not using the internet is the best solution to avoid online problems. (   )
3. Online problems are common and you can always get help. (   )
4. There are unknown people on social media who want to communicate for the purpose of data theft. (   )
5. Communicating with strangers can help you avoid online problems. (   )
6. Online bullying causes a person to lose confidence and feel trapped. (   )

School Book Questions

Answered in the Guide Answers

Issues and Challenges 1 Read and choose:

Read the situations and check the best answer.

1. Your friend is getting bullied online. He/She is upset. What do you say to your friend?
   a. "You're being a bit silly about this. Get over it!"
   b. "Let's bully them back!"
   c. "We should get their personal information and post it for everyone to see. Then they will stop."
   d. "You need to tell your teacher or a family member, even if you don't want to"

2. You accidentally end up on a website that includes bad language and scary images. What do you do?
   a. Forward it to a friend and ask if this is something you should show to your teacher or a family member.
   b. Look for contact information on the site so you can send a complaint.
   c. Leave the site immediately. Ask your teacher or a family member to help set parental controls on your device.
   d. Leave the site immediately, and never go online again.

Comprehension 2 Think, and answer:

Read and answer the questions.

1. What would you do if you were bullied on a social media platform?

   ....

2. When someone tries to commit online identity theft, what information might they look for?

   ....

3. Who should you turn to when you experience online problems? why?

   ....

ICT and Me 3 Think and write

Imagine that The General Department for Combating Internet Crimes in Egypt is looking for junior volunteers to help them protect its citizens from cyberattacks. You have been chosen to lead the Junior Division!

1. Choose three friends, siblings, or classmates to be part of your cybersecurity group. Write their names and explain their roles.

Name	Role
....	....
....	....
....	....
....	....

2. You need to choose your teacher or a family member to oversee your group. Who would you choose, and why?

....

....

3. Give some examples of how your group would help protect others from online threats.

....

....

4. The General Department for Combating Internet Crimes in Egypt wants to give each member of your group a special badge for all your hard work. Draw a picture of what the badge might look like. Include images or words that relate to online security.

....

....

Lesson 7

My Personal Digital Safety Plan

Creating Strong Passwords

إنشاء كلمة مرور قوية



It is important to have strong passwords.

- If your passwords are easy to guess, people can get into your accounts.
- This is called hacking and the people who do it are called hackers.

من المهم أن تمتلك كلمة مرور قوية :

فإذا كانت كلمة المرور الخاصة بك سهلة التوقع فقد يتمكن بعض الأشخاص من الدخول إلى حسابك.

وهذا ما يعرف بالقرصنة والأشخاص الذين يقومون بذلك يطلق عليهم قراصنة الكمبيوتر.

How to Create a Strong Password

1. A strong password will include letters, numbers, and special characters.
2. A strong password should be at least eight characters long.
3. Your password shouldn't include your name or other personal details.
4. Don't use the same password for all your accounts. If someone gets your password, they will be able to access your other accounts, too.



1 إذا أردت كلمة مرور قوية فيجب أن تتضمن حروفًا وأرقامًا ورموزًا خاصة.

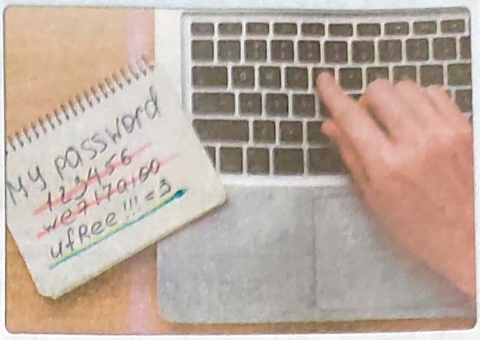
2 يجب أن تتكون كلمة المرور من ثمانية حروف على الأقل.

3 يجب ألا تتضمن كلمة المرور اسمك أو أي معلومات شخصية أخرى.

4 لا تستخدم كلمة مرور واحدة للدخول لجميع حساباتك، فإذا تمكن أحد الأشخاص من معرفة كلمة المرور سيتمكن من الدخول لجميع حساباتك.

It is tough to remember a lot of passwords.

Use a password manager or keep a list of your passwords in a safe place that only you and your teacher or a family member have access to.

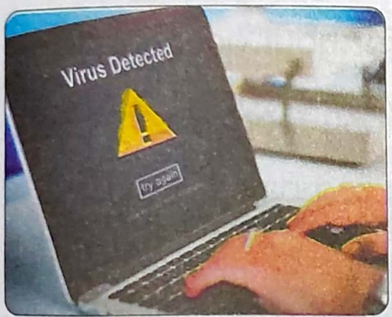


من الصعب تذكر الكثير من كلمات المرور

لذلك استخدم نظام إدارة كلمات المرور أو قم بإعداد قائمة بهذه الكلمات واحتفظ بها في مكان آمن حتى يمكنك أنت أو معلمك أو أحد أفراد عائلتك الوصول إليها.

Choosing Anti-virus Software
اختيار برنامج مكافحة الفيروسات

A computer virus can cause big problems, such as:



- Sending an email to everyone on your computer or deleting your files.

يمكن للفيروسات التي تصيب جهاز الكمبيوتر أن تؤدى إلى مشاكل خطيرة مثل:

إرسال رسائل إلكترونية دون علمك إلى عناوين الأشخاص على جهازك أو حذف ملفاتك.

A good anti-virus software can

1. Catch viruses before they affect your device.
2. Remove viruses that have already affected your device.
3. Fix damaged files.



تقوم برامج مكافحة الفيروسات بـ:

- رصد الفيروسات قبل أن تصيب جهازك.
- القضاء على الفيروسات التي أصابت جهازك.
- إصلاح الملفات المتضررة على جهازك.

Be careful while using the internet

كن حريصًا عند استخدام شبكة الإنترنت

» You should be aware of the importance of staying safe while using the internet.

لا بد أن تدرك جيدًا أهمية المحافظة على أمانك أثناء استخدام شبكة الإنترنت.

How Can You Be Safer Online?

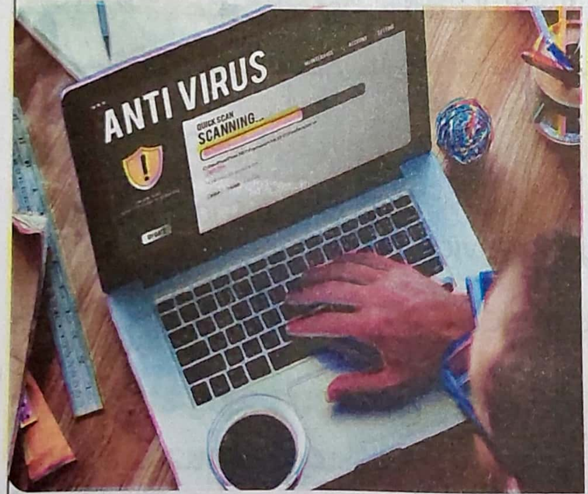
1 By using different passwords for

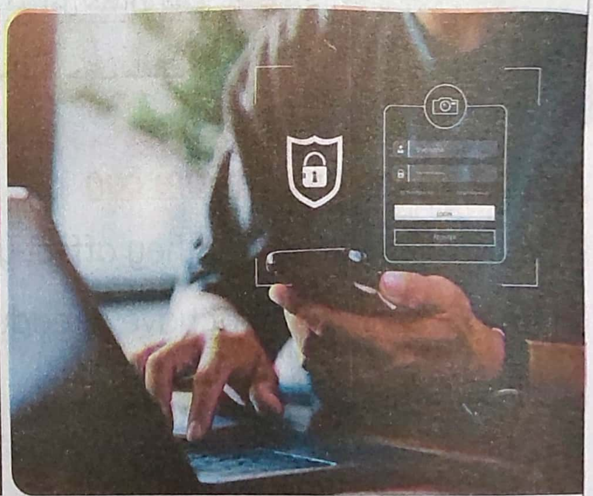
» Your different accounts on social media platforms, like Facebook and email sites.

» Your digital devices (computer, laptop, tablet, mobile phone).

2 By installing anti-virus software on your devices:

- There are websites that offer security services for your accounts.
- They do this by giving you instructions to follow for creating passwords for your personal accounts.





هناك مواقع على شبكة الإنترنت توفر بعض خدمات التأمين لحسابك

وذلك بإعطائك بعض التعليمات التي يجب مراعاتها عند إنشاء كلمة المرور الخاصة بك.

» Make sure you choose strong passwords which nobody can guess.

« احرص على اختيار كلمات مرور قوية وغير متوقعة من الآخرين.

Exercises

1 Choose the correct answer:

1. Using easy passwords could expose you to ....
   a. hacking b. bullying c. viruses
2. A strong password must include at least .... characters.
   a. six b. eight c. ten
3. Which password is the strongest one?
   a. abc12345 b. A@b56 c. H@68#agB
4. Your password shouldn't include .... because the hacker can guess it.
   a. small letters b. your personal information
   c. special characters
5. To remember your password easily, you have to ....
   a. use the same password for all your accounts
   b. use easy and short passwords
   c. keep a list of your passwords in a safe place
6. Anti-virus applications .... viruses before they affect your device.
   a. remove b. catch c. delete
7. One of the ways to be safe when using the internet is using .... passwords.
   a. short b. same c. different

2 Put (✓) or (✗):

1. It is better to use the same password for all your accounts to remember it easily. (   )
2. A hacker is someone who bullies you on social media sites. (   )

3. You must use anti-virus to protect your PC during surfing the internet. ( )
4. A strong password should be at least eight capit l letters. ( )
5. Using a strong password makes you safer online. ( )
6. Anti-virus apps remove viruses before they affect your device. ( )
7. Viruses may send an email to everyone on your computer or delete your files. ( )
8. Make sure you choose strong passwords which nobody can guess. ( )

3 Choose from column (A) what suits it in column (B):

Column (A) Online problems	Column (B) Description
1 Viruses	a. is unkind behavior that makes you lose confidence.
2 Bullying	b. may include opinions or even lies.
3 Hacking	c. is using your personal information by strangers.
4 Unreliable sources	d. could damage and delete your files.

1 .... 2 .... 3 .... 4 ....

4 Why are the following passwords unsafe to be used?

Weak Password	Reason
1 Ahmed01288833775	....
2 ad#@54t	....
3 abcdefgh	....
4 9-11-2000	....

School Book Questions

Answered in the Guide Answers

Life Skills **1** Look and answer:

Are these passwords secure? Suggest ways they can be made more secure.

1 Abdelaziz456	2 dQvlvtM	3 abcl123	2 Password"1
....	....	....	....

2 Think and answer:

Create your own example of a weak password and a strong password. Explain why each is either weak or strong.

1	2	3	4 ....
....	....	....	....

Critical Thinking **3** Think and write:

Virus software keeps you safe while you are online. How does a good anti-virus software protect your computer?

4 Think and draw

1 Design a logo for anti-virus software. Draw the logo here.

2 Describe your anti-virus logo. Explain why people should choose this anti-virus software.

....

» Researchers and scientists prepare digital reports about the subject of their studies using different programs like:

PowerPoint®, **video**, **documentaries** or **personal blogs**

to spread their findings and benefit people as best as they can.

يعد الباحثون أو المستكشفون تقارير رقمية حول مواضيع دراستهم باستخدام برامج متعددة منها:
برنامج العروض التقديمية (باوربوينت) أو بإعداد الفيديوهات أو الأفلام الوثائقية أو المدونات الشخصية
من أجل نشر نتائجهم وإفادة الناس قدر الإمكان.

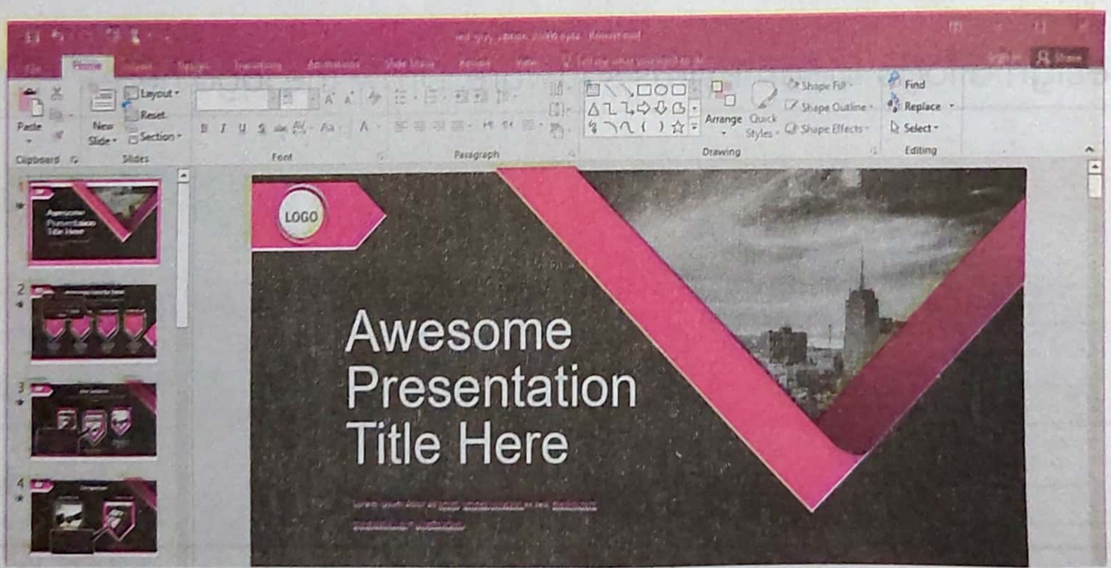
1 Microsoft PowerPoint

» PowerPoint® is a Microsoft program that helps us design a **presentation**.

هو برنامج من شركة مايكروسوفت يساعدنا في تصميم العروض التقديمية.

PowerPoint® is a fun way to present your ideas to others

- You can make text look interesting using WordArt®.
- You can also make your presentation appear like a book.
- In your book, you can include text and pictures about your topic. You can even include fun sound effects.



يعد طريقة ممتعة لتقديم أفكارك للآخرين من خلال:

- يمكنك جعل النص يبدو ممتعًا باستخدام تأثيرات النص.
- يمكنك أيضًا جعل عرضك التقديمي يبدو مثل الكتاب.
- فبكتابك، يمكنك تضمين نصوص وصور حول موضوعك. يمكنك حتى تضمين مؤثرات صوتية ممتعة.

2 Videos

How can you present your research by video?



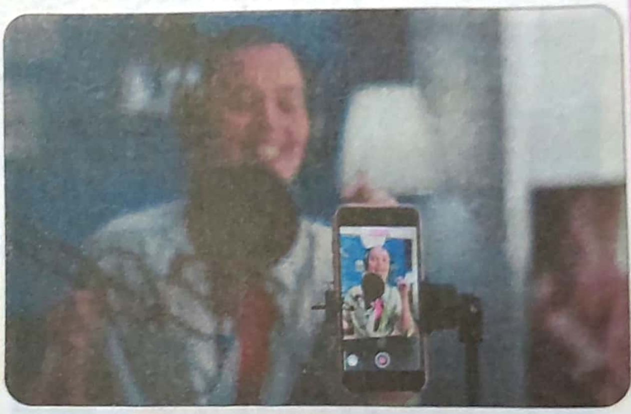
1 You can make one on a laptop, tablet, or cell phone without needing film sets or expensive cameras.

2 You can record yourself presenting your ideas.

3 You can interview others, and include them in your video, too.

4 You can also add more details and fun effects with different sounds and images.





كيف يمكنك تقديم بحثك بالفيديو؟

1 يمكنك صنع فيديو على جهاز اللاب توب أو الجهاز لوحي أو الهاتف محمول دون الحاجة إلى استديوهات تصوير أو كاميرات باهظة الثمن.

2 يمكنك تسجيل نفسك وأنت تقدم أفكارك (صوت و صورة).

3 يمكنك إجراء مقابلات مع الآخرين وتضمينهم في الفيديو الخاص بك أيضًا.

4 يمكنك أيضًا إضافة المزيد من التفاصيل والتأثيرات الممتعة بأصوات وصور مختلفة.

- There is a special video software you can download to help you.
- Remember to check and make sure an application is safe before you download it.

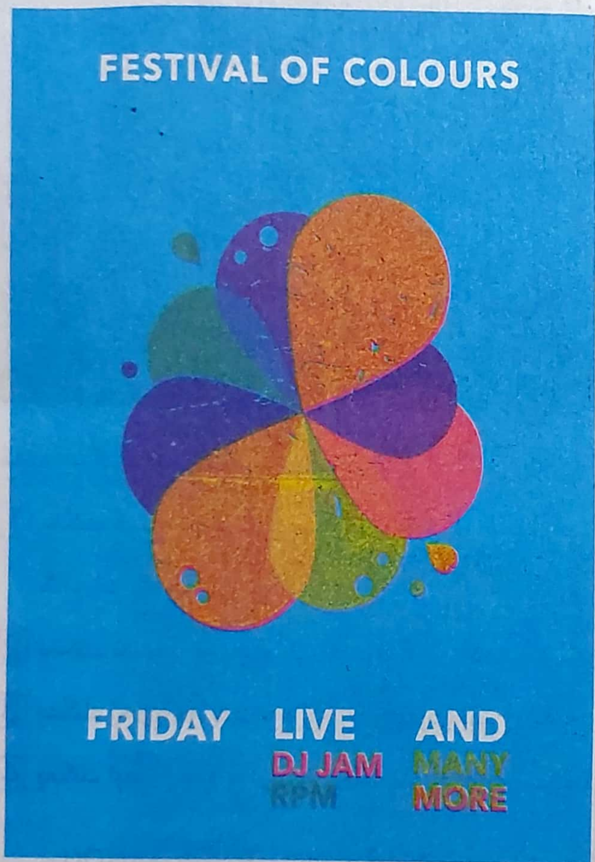
- يوجد برنامج فيديو خاص يمكنك تنزيله لمساعدتك - تذكر من التحقق من أن التطبيق آمن قبل تنزيله.

3 Posters

» One fun and effective way to present your research is by creating a poster.

How to design a poster

1. Choose fun colors when writing information that include **art like drawings**, **photos** or **cutouts**.
2. Always present your ideas clearly.
3. Always make sure that the text is large enough for others to read from a distance.
4. Also, always remember to credit your sources.





1. استخدم ألوانًا زاهية لكتابة المعلومات واجعل الملصق يبدو كلوحة فنية من خلال الرسومات و الصور.
2. احرص دائمًا على تقديم أفكارك بوضوح.
3. احرص دائمًا على الكتابة بخط عريض ليتمكن الآخرون من قراءة المعلومات من بعيد.
4. احرص على أن تذكر مصدر معلوماتك.

Exercises

1 Choose the correct answer:

1. ...... is a Microsoft program that enables you to design a presentation.
   a. MS Word   b. MS Excel   c. PowerPoint

2. Researchers can include their interviews with others in their ....
   a. posters   b. videos   c. presentations

3. Microsoft PowerPoint includes all the following, except ....
   a. interviews   b. texts   c. WordArt

4. WordArt in PowerPoint makes texts look ....
   a. smaller   b. interesting   c. boring

5. To design a creative poster, you must ....
   a. use texts without drawings
   b. use drawings without texts
   c. use texts with fun colors and drawings

2 Put (✓) or (✗):

1. Scientists use PowerPoint®, videos or personal blogs to present their researches. (   )
2. The presentation of PowerPoint may include texts, photos and interviews. (   )
3. You can interview others using your mobile phone or laptop. (   )
4. Always make sure that the text is small enough in your poster. (   )

Life Skills 1 Think and answer:

Online articles allow individuals or small groups to express their thoughts to their audience. Some may just include texts. Others will include visual media, like pictures or graphs. Create an online article using the information you gathered in the previous lesson (7). Report your findings. To prepare:

1. What is the topic you will be researching? Choose one of the ideas below.
   - Water shortages in Egypt
   - Littering problems in Egypt
   - How the fast-food industry is affecting the health of Egyptians

   ....

2. Why did you choose this topic?

   ....

3. Who is your target audience?

   ....

4. Which browser(s) and search engine(s) do you plan on using? Remember, think about safety!

   ....

5. Choose a teacher or member of your family to help guide you in your search. Write your choice below and explain why you chose this person.

   ....

6. Which presentation method do you plan on using? Check. Be sure to consider your method when you are researching your topic.

   PowerPoint® presentation (   )   Poster (   )   Video (   )

2 Take Notes:

As you research, write notes in your notebook. Be sure you include sources so you can credit them in your presentation.

....

....

3 Complete an outline:

It's time to organize your notes. Complete the outline to reflect how you will

School Book Questions

Answered in the Guide Answers

present your information.

Introduction	
Important section 1:	....
Important section 2:	....
Important section 3:	....
Conclusion	....

4 Create your presentation:

Finally, it's time to create your presentation. Check that your information is accurate. Check that there are no spelling or grammar mistakes. Remember to credit your sources and make your presentation informative and interesting. Have fun creating it!

ICT and Me 5 Think and answer:

1. What did you like most about researching your topic, and why?

   ....

2. What part of the researching process did you find the most difficult? Did you ask for help, and if so, who did you ask?

   ....

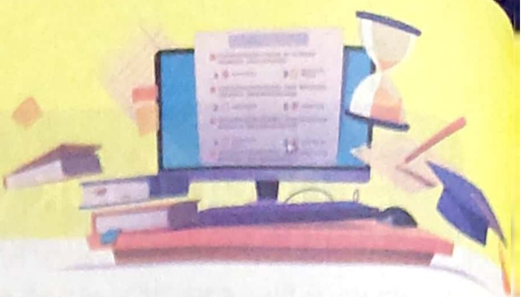
3. Explain your choice of presentation method. Why did you choose to present your topic using this method?

   ....

4. Is there anything about the research process that you might do differently next time? Explain why or why not.

   ....

Revision on Theme 2



1 Choose the correct answer:

1. We use a .... to copy the paper inside the computer.
   a. display screen b. speech synthesizer
   c. scanner
2. If your friend sent you friend request on a social media site, you must ....
   a. turn off the device b. delete the friend request
   c. verify his identity
3. .... includes your name, address and date of birth.
   a. Personal information b. Spam message
   c. Download file
4. If a friend sends you a file and you want to save it on your device, you need to ....
   a. download the file b. block the file c. scan the file
5. .... is one of the advantages of ICT tools.
   a. Bullying your colleagues b. Helping people of determination
   c. Over-use of electronic devices
6. .... is one of the most reliable sources on the internet.
   a. Published articles b. Digital blogs
   c. The Egyptian Knowledge Bank
7. The .... program protects your devices from the dangers that they may be exposed to.
   a. word processing b. operating system c. anti-virus
8. You can design your CV using a .... program.
   a. screen magnification b. word processing c. speech synthesizer
9. You can prepare a presentation using ....
   a. PowerPoint b. Word c. Excel
10. .... protects your devices from the dangers that you may be exposed to.
    a. Word processing b. PowerPoint c. Anti-virus
11. It's.............. that someone shares a picture of you without your permission.
    a. kind b. unkind c. normal
12. One of the strong passwords is ....
    a. ahmed b. Ahmed @3# c. 12345678

2 Put (✓) or (✗):

1. You can download files to your device without the internet. ( )
2. Blocking is one of the ways to communicate with your friends online. ( )
3. The quotation mark " " is used to limit the search results you want. ( )

4. You must ask permission before posting any information related to your friends. (   )
5. You can enter the library of the Egyptian Knowledge Bank (EKB) for free. (   )
6. Websites with links to (.edu) have a high degree of credibility. (   )
7. You can interview others using your mobile phone or laptop. (   )
8. Without the internet, you cannot see a video after downloading it. (   )
9. You must keep your personal data private to avoid viruses or spam messages. (   )
10. Google is the most famous operating system all over the world. (   )

3 Choose from column (A) what suits it in column (B):

A

Column (A)	Column (B)
1 Spam messages	a. allow you to communicate online.
2 Personal information	b. prevents this person from seeing your posts.
3 Instant messages	c. may include unwanted advertisement.
4 Blocking someone	d. may include your address or your name.

1 .... 2 .... 3 .... 4 ....

B

Column (A) Website domain	Column (B) They are run by
1 .com	a. non-profit organizations.
2 .gov	b. colleges, and universities.
3 .org	c. government agencies.
4 .edu	d. businesses commercial sites.

1 .... 2 .... 3 .... 4 ....

C

Column (A)	Column (B)
1 Results	a. if you would like the search engine to avoid this word.
2 Browser	b. an application that helps you access the information online.
3 Search engine	c. if you are searching for a particular phrase.
4 Add a + sign before the word	d. if you need these words to be included in your search.
5 Add a - sign before the word	e. an application is used to search on the internet.
6 Put the statement inside " "	f. a list of results that are displayed based on a specific search.

1 .... 2 .... 3 .... 4 .... 5 .... 6 ....

School Book Questions on Theme 2

Vocabulary 1 Write and compare:

Write a sentence for each set of words to explain the connection between them. Then compare your sentences with a partner.

1. Block and bullying
2. Credit and source of information
3. Identity theft and spam

Review Questions 2 Read and answer:

1. List three sources researchers can use to do research.
2. What do computer viruses do to a device and to the information on the device?
3. What should you do before tagging a friend in a photo or post?
4. Why is it helpful to put a phrase in quotes during an online search?
5. What is one reason a blog may not be a reliable source?
6. What is an example of online bullying?
7. What is hacking?
8. What is PowerPoint®?

Critical Thinking 3 Think and answer:

1. Why is the Egyptian Knowledge Bank a reliable source of information?
2. Explain why crediting a source is an example of ethical behavior.
3. How has ICT positively affected your life?

Essential Question 4 Think and complete:

Think about the information that you have learned in this theme. How does it help you to understand how to be safe and use reliable sources when online? Complete the sentence with your own ideas: After studying this theme, I know that I can be safe and use reliable sources.

Activity 5 Research and create:

Create an exhibition about a consumer product that uses ICT that you find interesting. Find photographs or draw pictures of it. Then make labels and write captions for your photographs and illustrations. Include information about:

- What makes it so interesting?
- How it works / how it helps users?
- The pros and cons of using such a device on a regular basis.
- Where can you find / buy / see it Invite your classmates to visit your exhibition?

General instructions

- The tasks are to be distributed, administered and assessed in two successive classes (one period).
- The teacher is to distribute the tasks and explain what to do each task.
- Students can use the student's book.

1 "A diagram of operations that computer can do for processing data inside it"

Task Description

Dear student,

The computer stores, processes and outputs data as information.

Draw data input and processing steps to the computer until data appears as information on the screen. (In case coloring pens are available, you can use them to clarify each process).

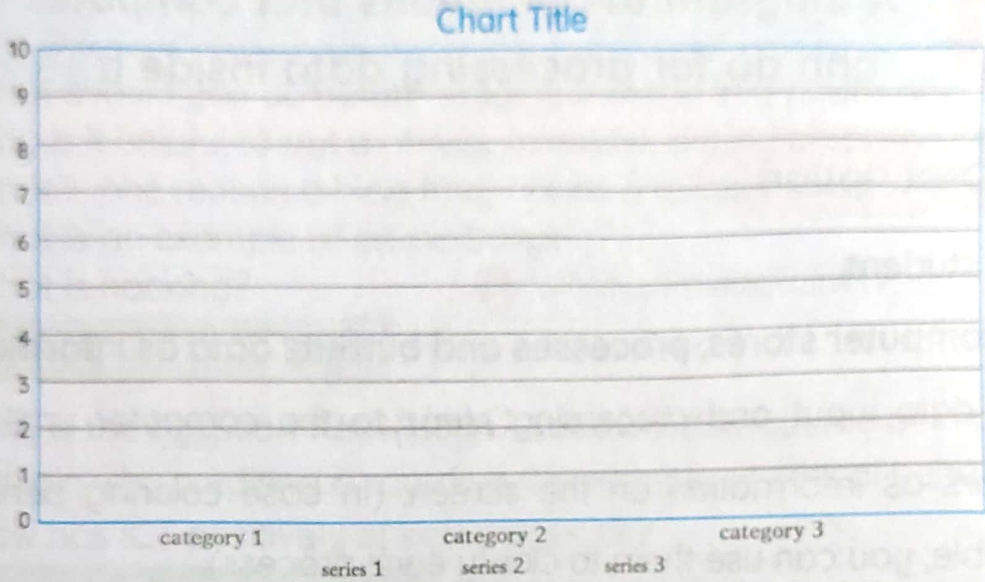
You can use the following words to help (Operating system - CPU - Data entry - Display screen).

2 "Questionnaire Results Graph"

Task Description

Dear student,
You conducted a questionnaire to your colleagues on the best digital communication applications they prefer, you found out that:

Ten of your colleagues prefer email. Seven of your colleagues prefer WhatsApp. Three of your colleagues prefer SMS. Use the following chart to express the achieved results. (In case coloring pens are available, you can use them to clarify the questionnaire results)



3 "Preparing and writing an email to your colleague"

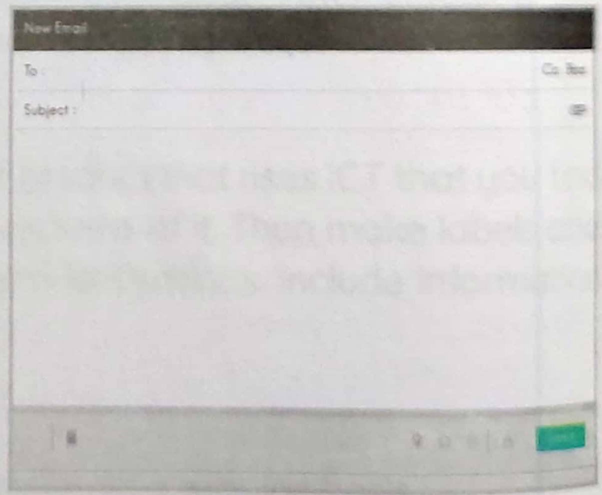
Task Description

Dear student,
Your teacher asked you to prepare a research about a certain topic, then to send it to your colleague (Ibrahim) via email...

Write an email to your colleague clarifying the points below:

• To • Subject • Email body

You can use the opposite figure to help.



4 "Design a logo for your school's bullying awareness team"

Task Description

Dear student,

Your teacher asked you to form a team to raise the students, awareness of the dangers of bullying in your school, and to Design a logo for this team. (In case coloring pens are available, you can use them to draw the logo)

5 "Poster Design team"

Task Description

Dear student,

The country establishes a lot of projects, one of which is water consumption rationalization.

Draw a poster presenting some phrases or paintings to urge your colleagues on water consumption rationalization.